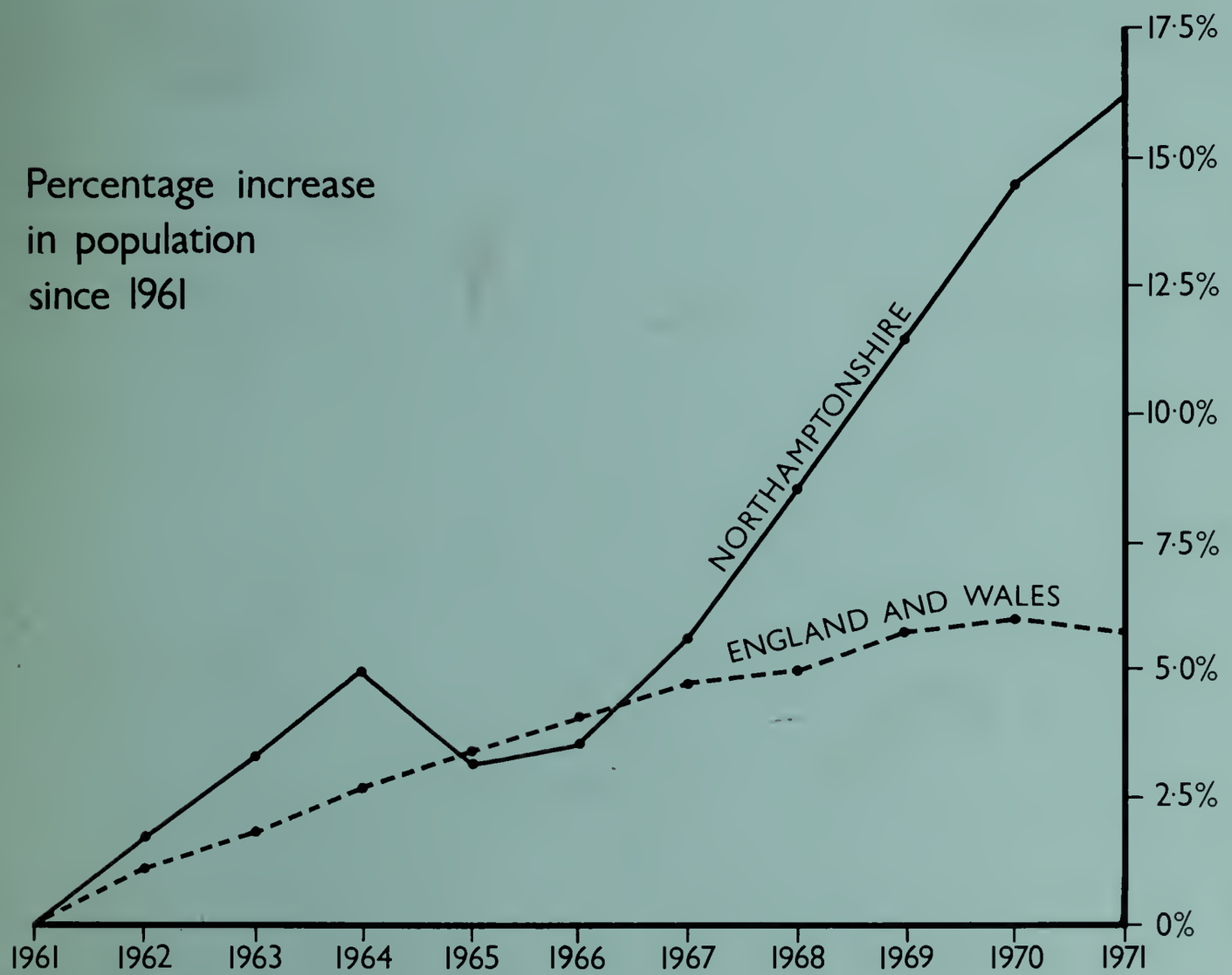
THE HEALTH OF NORTHAMPTONSHIRE in 1971

REPORT of the COUNTY MEDICAL OFFICER OF HEALTH



HOME NURSING

THE HEALTH of NORTHAMPTONSHIRE in 1971

Report of the County Medical Officer of Health

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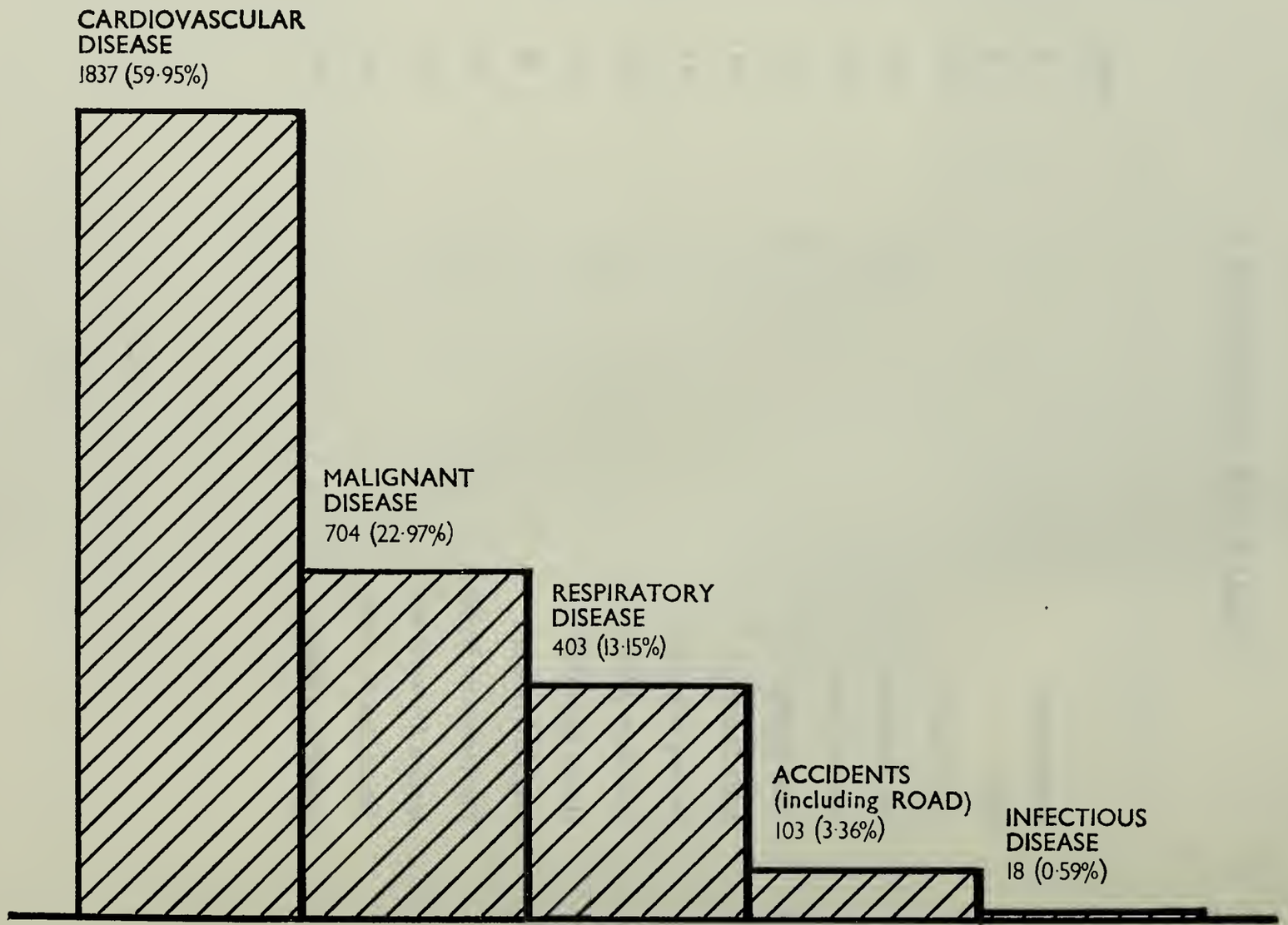


NORTHAMPTONSHIRE COUNTY COUNCIL.

May, 1972.

To the Chairman and Members of the Northamptonshire County Council

Mr. Chairman, my Lords, Ladies and Gentlemen,

In accordance with the requirements of the Public Health Officers Regulations, 1959, I have the honour to present the 75th annual report on the Health of Northamptonshire which incorporates the 63rd annual report on the health of schoolchildren in the County.

I must start by thanking the County Council for releasing me for three months to attend a Senior Managers' Development Programme at the Oxford Centre for Management Studies and also the King's Fund College of Hospital Management which sponsored me on this course. This was a most interesting and valuable experience which provided some new insights into management.

Rate of increase in the population of the County

Continual references to the rate of increase in the population in the County tend to decrease their effectiveness. Nevertheless it must again be referred to because of the problems which it causes. The rate of increase in the population was 1.6% higher than in 1970, as compared with the decrease in population of 0.35% for England and Wales. The birth rate for the County of 18.48 per 1,000 population was higher than the previous year, and the ratio of the local adjusted rate to the national rate was 1.24, i.e. 24% above the average for England and Wales. The increase in the school child population is referred to later.

Family Planning

A full account is given later of the extension of the family planning services where the progress has been satisfactory, but even the most efficient family planning service could not cope with a population increase of this size.

Main causes of death

Following the usual pattern, diseases of the heart, blood vessels, respiratory system and cancer were responsible for the majority of deaths in the County. Diseases of the heart and blood vessels were the main killers, and it is to be hoped that the practice adopted by general practitioners in some parts of the country of screening adults for hypertension will become an accepted part of general practice in this County. This authority is doing its best to encourage the adoption of this practice.

Health Centres

The opening of a fourth health centre at Towcester was an important event. The building of Irthlingborough Health Centre began in April, 1971 and the planning of Rothwell, Corby, Irchester Health Centres and the permanent health centre at Queensway, Wellingborough continued. The decision of the Oxford Regional Hospital Board to develop a community hospital at Corby as part of a Health Centre/Diagnostic Centre/and Maternity Hospital complex makes this a potentially unusual project.

Liaison with other branches of the National Health Service

Further links with the hospital and general practitioner services were forged during the year and are beginning to bear fruit in the current year. They will be referred to in the next report. Meanwhile I must pay tribute to those in the other branches of the service who have co-operated over the years in the development of new ideas and the introduction of new methods of working together for the benefit of patients.

Reorganisation of the County Nursing Service

Preparation for the reorganisation of the County Nursing Service and the introduction of a new structure à la Mayston occupied a very great part of the time and energy of senior staff in the Department, and I am glad to say that it was implemented on April 1st of the current year. I have no doubt that in time it will lead to an even more efficient service and also that it will provide our nursing colleagues with satisfactory career opportunities.

Reorganisation of the National Health Service

The publication of the eagerly awaited Consultative Document proved somewhat disappointing. It left many questions about the future pattern of the reorganised National Health Service unanswered, and it is regrettable that at the time of writing we still have to rely on rumours and not on facts. In addition, after long deliberation, the conclusions of the Hunter Committee have not yet been published, thus adding to the general air of uncertainty.

Although April 1st, 1974 is the date on which reorganisation is to be implemented, there is a signal lack of preparation for this massive task, in the field. The " testing " of the now famous " hypotheses " is under way in various parts of the country and one can only hope that this process will be completed as speedily as possible and that out of all these deliberations there will emerge a reasonably sound organisational pattern.

School Health Service

The rapid growth in the schoolchild population continues. The percentage increase of 5.7% in 1971 is more than double the average increase for England and Wales. This inevitably causes problems but, nevertheless, in 1971 the number of children examined was twice the number examined in the previous year.

Continued emphasis is laid on the detection and assessment of handicapped children. An increasing amount of time is being allocated to the children in special schools, in order to ensure that their needs are thoroughly assessed. An example of what can be done by an individual to detect potentially handicapped children is the study on crossed laterality by Dr. Puddifoot. The links established with Princess Marina Hospital are proving to be valuable and all those involved deserve a special word of thanks. Equally those who staff the enuresis clinics deserve mention. There are few handicaps so socially unattractive and undesirable and although it causes considerable problems for parents and children, it is not a field which attracts much attention from the medical profession. Lack of attention to, and understanding of, this problem is, of course, not confined to the medical profession.

Regrettably there is little progress to report in the field of child guidance but those who read the report by Dr. Tracey on " Teachers and Mental Health " will find it interesting, particularly as the idea originated from a local mental health association.

Other services continue to develop. The eye clinics in the northern part of the County are being reorganised at the suggestion of Dr. R. Ingram. The speech therapists seem to find health

centres conducive to teamwork, and in health education there have been advances which may yet prove significant. Teachers are becoming more and more involved in this work and the preparation of the booklet *Areas of Learning* for primary schools involved much hard work for those directly concerned, which I feel will be duly rewarded.

The dental service suffered from staffing problems, but, nevertheless, managed to make significant strides. The links with Princess Marina Hospital and the establishment of a special dental service for the handicapped are most probably " firsts " in this field and deserve special mention.

At the time of writing, the future of the School Health Service has not yet been decided. It is encouraging, if somewhat surprising, to find that this service, which has often been seriously underestimated, except by those directly involved, is now being seen in a different light. Education authorities would like to retain control over it although others feel that it should be transferred to the new health authorities. One hopes that the considerable attention being paid to it as a result of this debate will bring benefits to the service.

Staff

Two members of staff, who had given long and loyal service to the County retired during the year—Miss N. Taylorson, Superintendent Nursing Officer, who was in charge of the Nursing and Midwifery Services during a period of great change, much of it initiated and guided by her, and Mr. E. W. Smart, who served for forty-two years with the County Council and who was for twenty-four of these years in charge of the School Health Section. They are greatly missed by their colleagues. I wish them many happy years of retirement.

Death of former Chairman

Sadly I have to record the death of Mrs. A. U. Muxlow, O.B.E., former Chairman of the Health Committee for seven years and Chairman of the former Maternity, Nursing and Care Sub-Committee for ten years. Mrs. Muxlow was well-known for her voluntary work, particularly in the interests of mothers and children, and was leader of the Voluntary Committee of the Rushden Infant Welfare Centre for more than thirty years. It was undoubtedly her keen interest in this service which influenced the Health Committee to build in 1962 in Rectory Road, Rushden, what was then its most modern health clinic. Mrs. Muxlow was awarded the O.B.E. in 1966.

Finally, I should like to thank the Chairman and members of the Health and Education Committees, my colleagues in other departments of the County Council for their continued and valuable support, and the staff of my own department for their loyalty and hard work during a very difficult year.

I have the honour to be,

Your obedient servant,

W. J. McQUILLAN,
County Medical Officer of Health and
Principal School Medical Officer.

STAFF

County Medical Officer of Health and Principal School Medical Officer:

W. J. McQuillan, M.B., B.Ch., F.F.C.M., D.P.H., D.C.H., L.M.

Deputy County Medical Officer of Health and Deputy Principal School Medical Officer:

J. Sarginson, M.B., B.S., M.F.C.M., D.P.H.

Senior Medical Officers:

Miss V. V. Tracey, B.Sc., M.B., B.Ch., M.F.C.M., D.P.H., D.C.H.
N. Soloff, M.B., Ch.B., D.P.H.

Senior Clinical Medical Officers:

I. J. Cope, M.R.C.S., L.R.C.P., D.P.H.
L. J. F. Glynn, M.B., Ch.B., D.Obst.R.C.O.G., M.R.C.P.I., D.P.H., D.C.H.

Senior Assistant Medical Officer:

Mrs. J. M. St. V. Dawkins, M.B., B.S., F.F.C.M., D.P.H., D.C.H., (*also District Medical Officer of Health*)

Medical Officers in Department:

Mrs. M. H. Ballantyne, M.B., Ch.B. (*part-time*)
Mrs. M. V. Capon, M.B., B.S.
Mrs. P. T. Dooley, M.B., B.S., M.R.C.S., L.R.C.P. (*part-time from 20th September*)
Mrs. G. Duncan M.B., Ch.B. (*part-time*)
J. V. L. Farquhar, M.A., M.R.C.S., L.R.C.P., D.P.H. (*also District Medical Officer of Health*)
Mrs. A. C. Fogarty, M.B., B.S., D.C.H., D.R.C.O.G. (*part-time*)
Mrs. P. Jennings, B.A., M.B., B.Ch., B.A.O., D.C.H. (*part-time from 19th May*)
F. R. N. Lynch, M.B., B.Ch., M.F.C.M., D.P.H. (*also District Medical Officer of Health*)
Mrs. K. A. L. Mazey, M.B., Ch.B. (*part-time*)
Mrs. M. I. Mortimore, M.B., Ch.B., D.C.H. (*part-time from 1st September*)
Mrs. J. Naylor, M.B., B.Ch. (*part-time*)
T. D. Paton, M.B., Ch.B. (*part-time*)
Mrs. R. M. Puddifoot, M.B., B.S., L.M.S.S.A., D.Obst.R.C.O.G., D.C.H. (*part-time from 12th August*)
Mrs. S. Roberts, M.B., B.S. (*part-time*)
Mrs. P. A. Rogers, M.B., Ch.B., D.C.H. (*part-time*)
D. C. Sargant, M.A., B.M., B.Ch., L.M.S.S.A.
C. M. Smith, O.B.E., M.A., M.D., Ch.B., D.P.H. (*part-time*)
Mrs. M. B. Smith, M.B., Ch.B., D.P.H. (*part-time*)
Mrs. S. Spooner, M.B., B.S. (*part-time*)
Mrs. M. Stevens, M.B., Ch.B. (*part-time*)
Mrs. S. E. Swan, M.B., B.S. (*part-time*)
Mrs. M. M. Williams, M.B., Ch.B. (*part-time to 28th October*)
Mrs. J. F. Woolfenden, M.B., Ch.B. (*part-time*)

General Practitioners employed part-time:

A. C. Barthells, M.D., M.R.C.S., L.R.C.P., M.R.C.O.G.
D. J. Boulton, M.R.C.S., L.R.C.P., L.M.S.S.A., D.Obst.R.C.O.G.
C. N. Bruton, M.B., Ch.B.
G. N. Cash, M.B., B.S.
S. Clements, M.B., B.S.
C. M. Cripps, M.A., M.B., B.Ch., D.Obst.R.C.O.G.
D. P. Curran, M.B., B.S., M.R.C.S., L.R.C.P., D.A., D.Obst.R.C.O.G. (*to 6th October*)
G. H. C. Daley, M.B., Ch.B., D.Obst.R.C.O.G.
R. I. Froment, M.B., Ch.B.
C. M. Graham, M.B., Ch.B.
J. A. Holland, M.A., M.B., B.Chir.
N. M. How, M.B., B.S.
J. W. Hughes, M.B., B.S., M.R.C.S., L.R.C.P.
S. J. S. Hughes, B.M., B.Ch.
J. M. Justice, M.B., B.S., D.Obst.R.C.O.G. (*from 14th January*)
J. Lawson-Matthew, M.B., B.S.
D. E. Leiber, M.R.C.S., L.R.C.P., M.B., B.S., D.A., D.Obst.R.C.O.G.
M. P. Lewis, B.A., B.M., B.Ch.
R. G. Lilly, M.B., B.S.
I. D. MacKichan, M.A., M.B., B.Ch., M.R.C.S., L.R.C.P., D.Obst.R.C.O.G.
J. B. Moser, M.R.C.S., L.R.C.P.
I. J. R. Musson, L.M.S.S.A.
D. W. Roberts, M.A., M.B., B.Ch., M.R.C.S., L.R.C.P.
D. L. Scawn, L.R.C.P., L.M.
W. A. Sharman, M.B., Ch.B., D.Obst.R.C.O.G. (*from 27th January*)
A. Sutton, M.B., Ch.B., D.Obst.R.C.O.G.
R. B. W. White, M.B., Ch.B.

Chief Dental Officer:

P. W. Gibson, L.D.S., D.D.P.H.

Dental Officers:

Mrs. J. A. Anderson, B.D.S. (*part-time*)
Mrs. J. A. Boulton, B.D.S. (*part-time*)
Mrs. F. Campbell, L.D.S. (*part-time*)
R. J. H. Corfe, L.D.S.
C. Cox, B.D.S., D.D.P.H.
Mrs. M. E. Hatrick, B.D.S. (*to 31st July*)
Mrs. M. M. Herd, B.D.S.
R. D. R. Hopkinson, L.D.S.
J. R. Humphreys, B.D.S., D.D.P.H.
Mrs. M. Humphreys, B.D.S. (*part-time*)
Mrs. F. M. Jones, L.D.S.
Mrs. R. S. Kingham, B.D.S. (*part-time from 23rd September*)
J. M. Lacey, L.D.S.
C. M. Perry, L.D.S.
Mrs. P. C. Robinson, L.D.S. (*part-time from 20th September*)
M. A. Walsh, B.D.S.
Mrs. V. Wilkinson, B.D.S.

Dental Auxiliaries:

Mrs. K. Burgess (*part-time from 16th February*)
Miss J. Griffin
Miss J. E. C. St. Romaine
Miss A. M. S. Thomas

Chief Clerk:

R. J. Bruce

Senior Clerk (Clinical Services):

C. S. Mobb

Senior Clerk (Non-Clinical Services):

J. B. Royle, D.M.A., Grad.M.I.P.M. (*from 1st October*)

Assistant Senior Clerk (Clinical Services):

C. D. Smith, D.M.A.

Assistant Senior Clerk (Non-Clinical Services):

R. J. Lane, D.M.A. (*from 23rd August*)

Senior Administrative Assistant (Health Centres):

Miss J. Pearson

Chief Nursing Officer:

Miss V. M. Greenham, S.R.N., S.C.M., H.V.Cert., Dip.Soc.Studies, Q.N.

Superintendent Nursing Officer:

Miss N. Taylorson, S.R.N., S.C.M., M.T.D., H.V.Cert., Q.N. (*to 24th October*)

Deputy Superintendent Nursing Officer:

Miss L. Bogle, S.R.N., S.C.M., H.V.Cert., Cert.Soc.Studies, Q.N.

Assistant Superintendent Nursing Officers:

S. Roberts, S.R.N., Q.N.
Miss F. I. Taylor, S.R.N., S.C.M., H.V.Cert., Dip.Soc.Sc., Q.N.

Superintendent Health Visitor:

Mrs. M. M. Walker, S.R.N., H.V.Cert.

Assistant Superintendent Health Visitor:

Mrs. E. Dixon, S.R.N., S.C.M., H.V.Cert.

Health Education Organiser:

Miss J. M. Wingfield, S.R.N., S.C.M., D.H.Ed., H.V.Cert.

Assistant Health Education Organisers:

Mrs. N. T. Southam (*to 25th July*)
M. R. Whyman (*from 1st September*)

County Ambulance Officer:

P. H. J. Wilkinson.

Deputy County Ambulance Officer:

M. T. Devereux.

Health Centre Administrators:

Burton Latimer—Mrs. P. Leslie (*to 28th December*)
Mrs. J. Woods (*acting from 29th November*)
Daventry—Mrs. J. Burrell
Towcester—Mrs. S. Stoyles
Wellingborough Queensway—Mrs. B. Brigstock

Area Speech Therapists:

Mrs. A. Hamida, L.C.S.T.
Miss R. Kingston, L.C.S.T., Dip.I.P.A. (*to 27th September*)

Senior Speech Therapist:

Mrs. J. M. Bolton, L.C.S.T. (*from 1st April*)

Speech Therapists:

Miss M. Axe, L.C.S.T. (*to 30th September*)
Mrs. J. M. Bolton, L.C.S.T. (*to 1st April*)
Mrs. D. Clarke, L.C.S.T. (*part-time to 30th November*)
Miss S. George (*from 1st September*)
Mrs. D. Goodridge, L.C.S.T. (*part-time*)
Miss P. Smith (*from 23rd August*)
Mrs. W. E. Turner, L.C.S.T. (*part-time*)
Mrs. G. Wilson, L.C.S.T. (*part-time*)

Chiropodist:

R. Gaskill, L.Ch., S.R.Ch.

VITAL STATISTICS

GENERAL

Area of the Administrative County	574,715 acres
Population (Census 1961)	292,584
,, 1970, mid-year estimate	344,160
Structurally separate dwellings occupied (Census 1961)	96,552
Private households (Census 1961)	93,649
Rateable value (April 1st, 1971)	£14,016,389
Product of a penny rate (1970-71)	£56,022

BIRTHS

	Northamptonshire				England & Wales
	Male	*Female*	*Total*	*Rate*	*Rate*
Total live births	3,348	3,014	6,362		
Live birth rate per 1,000 population				18.48	16.04
Illegitimate live births per cent of total live births				6.51	8.38
Stillbirths	31	37	68		
Stillbirth rate per 1,000 live and stillbirths				10.58	12.48
Total live and stillbirths	3,379	3,051	6,430		

DEATHS

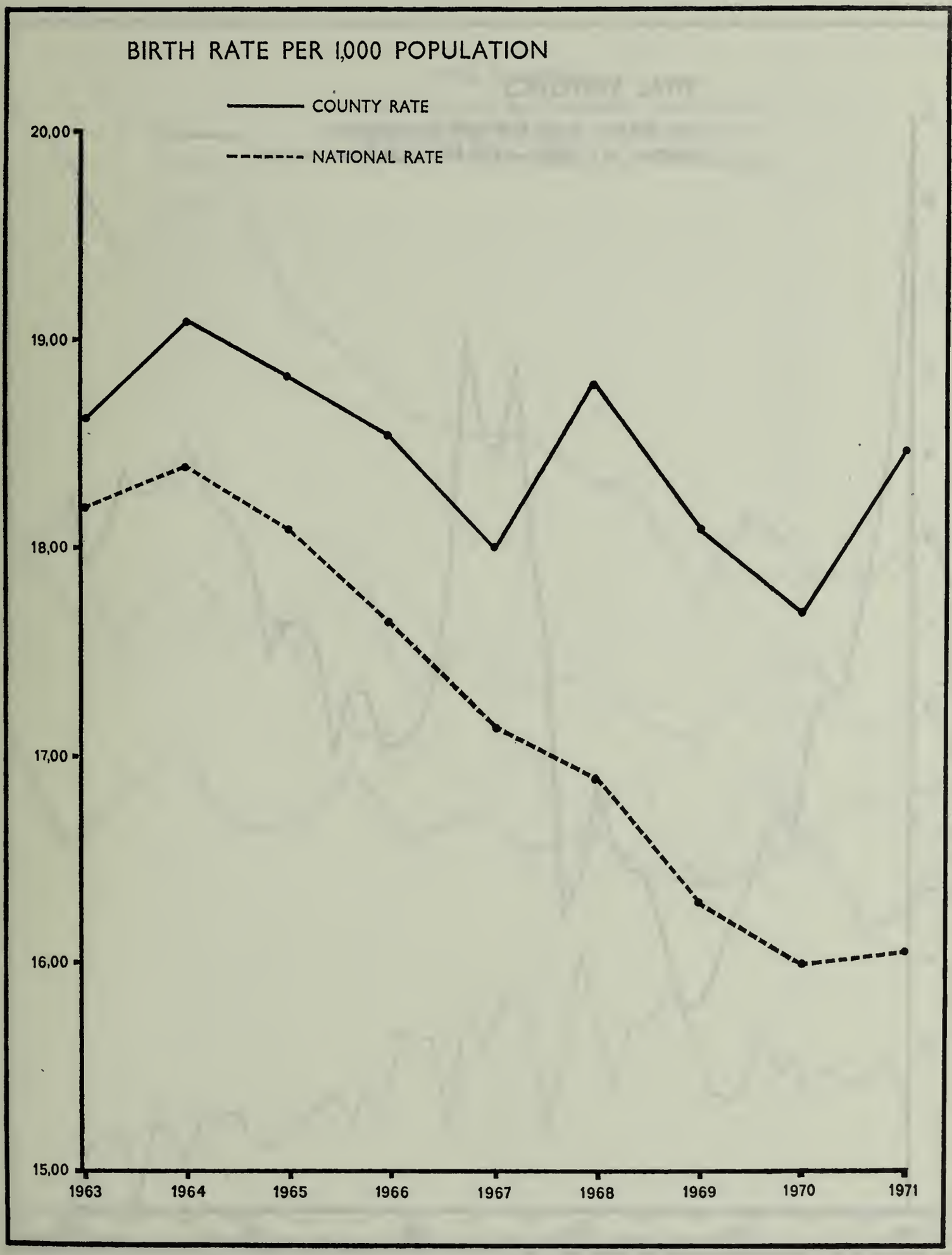
Total deaths (all ages)	1,833	1,641	3,474	10.09	11.60
Infant deaths (under 1 year)	68	46	114		
Infant mortality rate :					
Total (per 1,000 live births)				17.92	17.53
Legitimate (per 1,000 legitimate live births)				17.48	
Illegitimate (per 1,000 illegitimate live births)				24.15	
Neonatal (first four weeks) mortality rate per 1,000 live births				10.69	11.63
Early neonatal (under 1 week) mortality rate per 1,000 live births				8.65	8.81
Perinatal (stillbirths and deaths under 1 week combined) mortality rate per 1,000 live and stillbirths				19.13	21.75
Maternal deaths (including abortion)				1	
Maternal mortality rate per 1,000 live and stillbirths				0.16	*

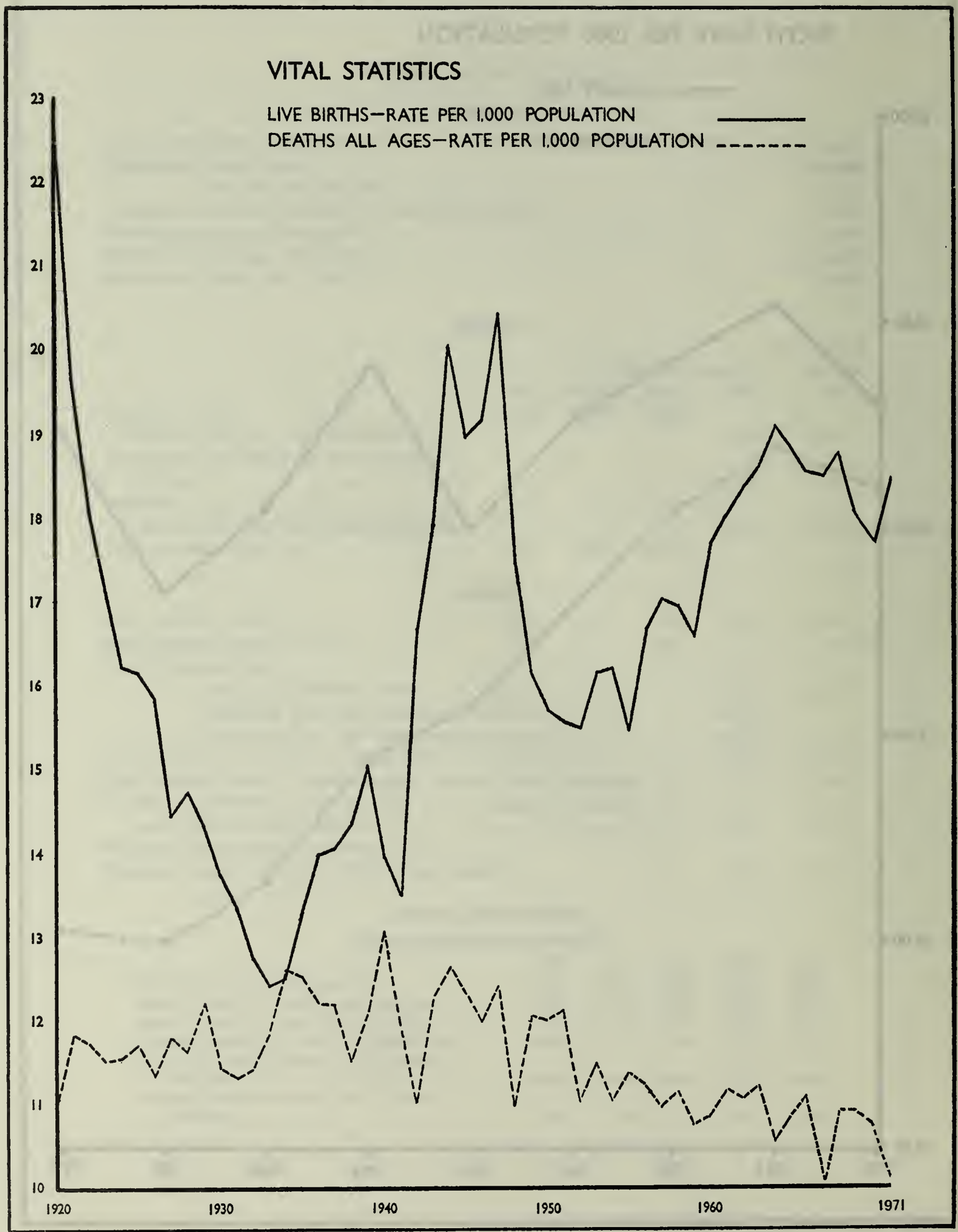
NORTHAMPTONSHIRE

Birth and death rates 1967-1971

	1971	1970	1969	1968	1967
Live birth rate per 1,000 population ...	18.48	17.71	18.10	18.80	17.99
Stillbirth rate per 1,000 live and stillbirths ...	10.58	13.19	14.03	12.45	15.44
Infant mortality rate per 1,000 live births ...	17.92	18.05	16.07	19.24	17.64
Neonatal mortality rate per 1,000 live births ...	10.69	11.37	9.21	12.77	11.41
Perinatal mortality rate per 1,000 live and stillbirths	19.13	23.53	21.45	21.95	24.39
Maternal mortality rate per 1,000 live and stillbirths	0.16	nil	0.17	0.35	nil

* *Not available.*


BIRTH RATE PER 1,000 POPULATION
COUNTY RATE
NATIONAL RATE
20,00
19,00
18,00
17,00
16,00
15,00
1963
1964
1965
1966
1967
1968
1969
1970
1971


VITAL STATISTICS
LIVE BIRTHS—RATE PER 1,000 POPULATION
DEATHS ALL AGES—RATE PER 1,000 POPULATION
23
22
21
20
19
18
17
16
15
14
13
12
11
10
1920
1930
1940
1950
1960
1971


VITAL STATISTICS
PERINATAL DEATHS—RATE PER 1,000 LIVE AND STILL BIRTHS
INFANT DEATHS—RATE PER 1,000 LIVE BIRTHS
STILLBIRTHS—RATE PER 1,000 LIVE AND STILLBIRTHS
NEONATAL DEATHS—RATE PER 1,000 LIVE BIRTHS
40
30
20
10
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971

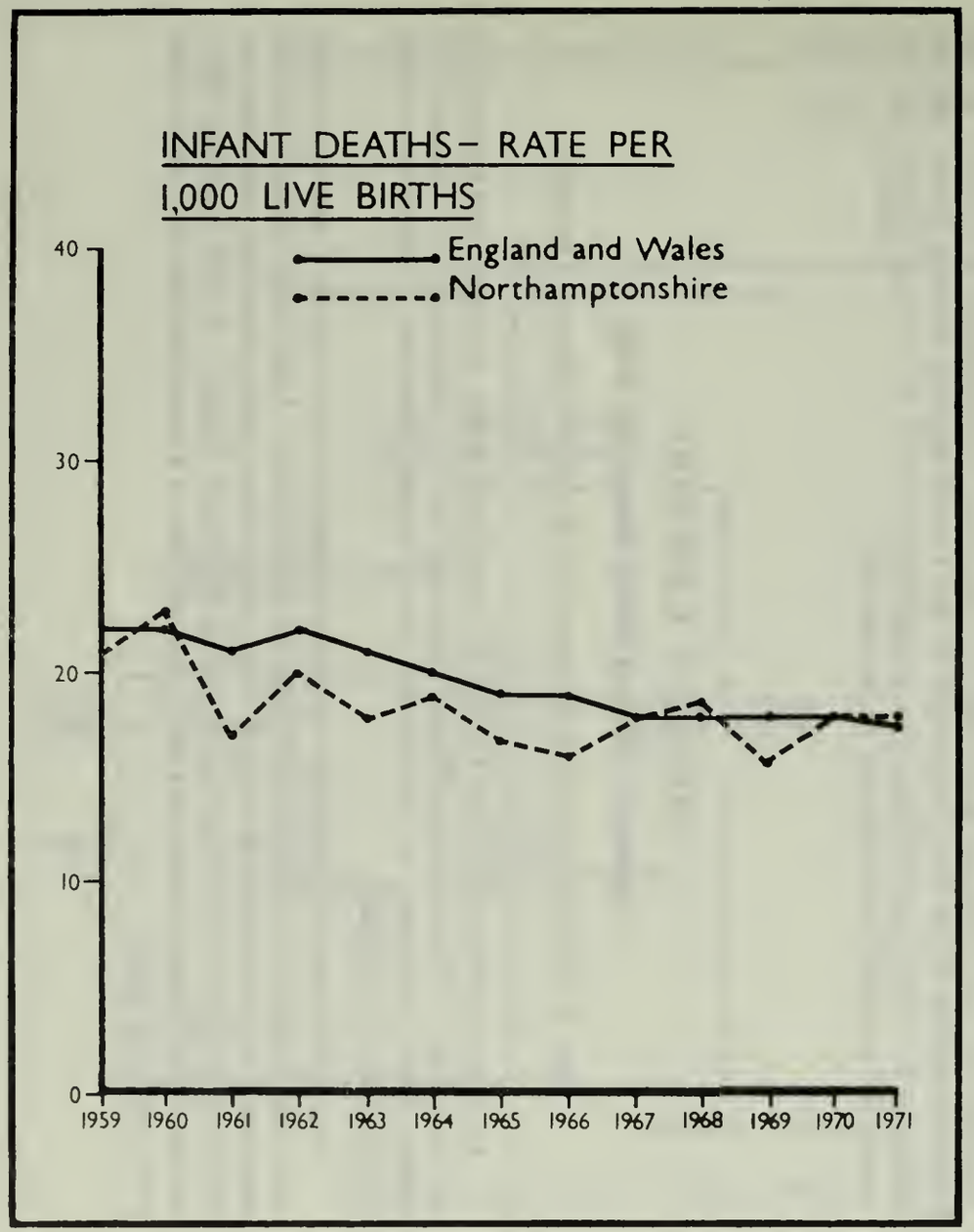
The following tables compare (a) the infant death rate per 1,000 live births, and (b) the perinatal death rate, per 1,000 live and still births, in Northamptonshire with those of Corby, Daventry, Kettering and Wellingborough, and for England and Wales over the last twelve years.

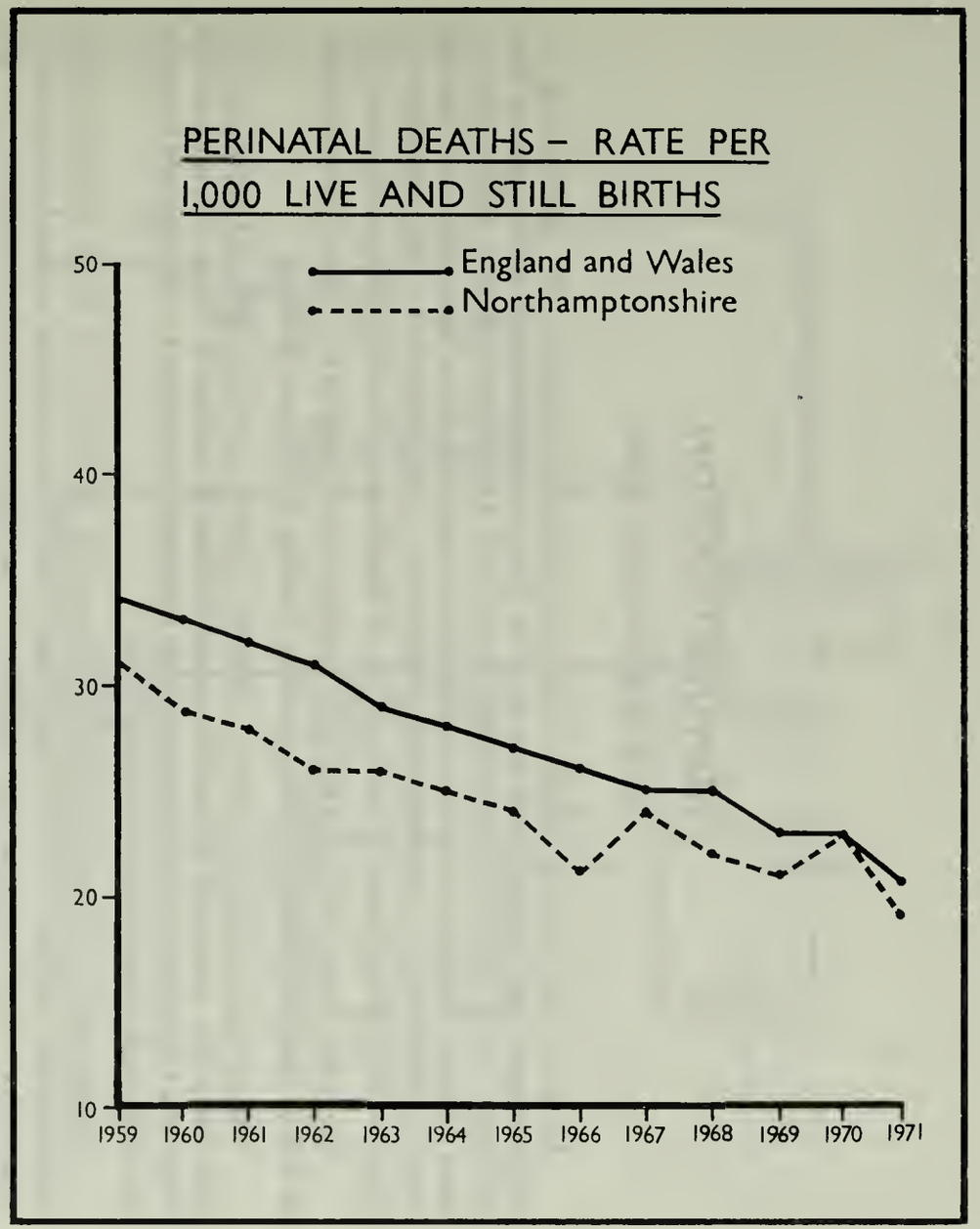
(a) **Infant deaths**

	Northamp-tonshire	*Corby U.D*	*Daventry M B*	*Kettering M B*	*Welling-borough U D*	*England and Wales*
1959	20	17	20	19	32	22
1960	23	32	29	19	18	22
1961	17	30	—	16	17	21
1962	20	26	19	11	26	22
1963	18	20	10	18	14	21
1964	19	23	10	23	23	20
1965	17	29	—	15	18	19
1966	16	28	16	9	20	19
1967	18	22	15	17	17	18
1968	19	19	25	24	26	18
1969	16	19	7	15	21	18
1970	18	22	14	22	25	18
1971	18	25	28	15	7	18

(b) **Perinatal deaths**

1959	31	29	48	33	38	34
1960	29	30	14	17	38	33
1961	28	38	15	30	24	32
1962	26	32	36	17	34	31
1963	26	27	28	29	23	29
1964	25	31	38	27	33	28
1965	24	32	42	27	16	27
1966	21	31	24	18	26	26
1967	24	23	15	30	24	25
1968	22	26	34	21	29	25
1969	21	26	18	15	18	23
1970	23	29	17	31	35	23
1971	19	19	18	17	15	22


INFANT DEATHS – RATE PER
1,000 LIVE BIRTHS
England and Wales
Northamptonshire
40
30
20
10
0
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971


PERINATAL DEATHS – RATE PER
1,000 LIVE AND STILL BIRTHS
England and Wales
Northamptonshire
50
40
30
20
10
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971

ADMINISTRATION

Mr. R. J. Bruce, Chief Clerk

As stated last year, the Health Committee made recommendations for strengthening the administrative and clerical staffs and most of these recommendations were approved from 1st April. As a result, the administrative work of the Department has been divided into two main divisions—clinical services and non-clinical services, each with a Senior Clerk and Assistant Senior Clerk in charge, under the overall supervision of the Chief Clerk. The administrative structure of the Department is now as set out in diagrammatic form on the opposite page.

The Senior Clerks of each of the main divisions are regarded as deputies to the Chief Clerk, as well as being responsible for the day-to-day running of their own divisions.

It is gratifying to know that both the Health Committee and the Salaries and Establishments Sub-Committee, recognised the need to spread the load in the higher strata of administration within the Department, by authorising the new appointments referred to, although still requiring the Chief Clerk to accept overall responsibility.

Towards the end of the year, interest increased in the form which would be taken by the administrative structure of the new area health authorities which are proposed under the re-organisation of the health services in 1974. In anticipation of this re-organisation, it was suggested that a co-ordinating group should be formed of chief administrative officers of local health authorities within the area covered by the Oxford Regional Hospital Board, and the machinery for setting up this group was completed by the end of the year, although its first meeting did not take place until early in January 1972.

HEALTH CENTRES

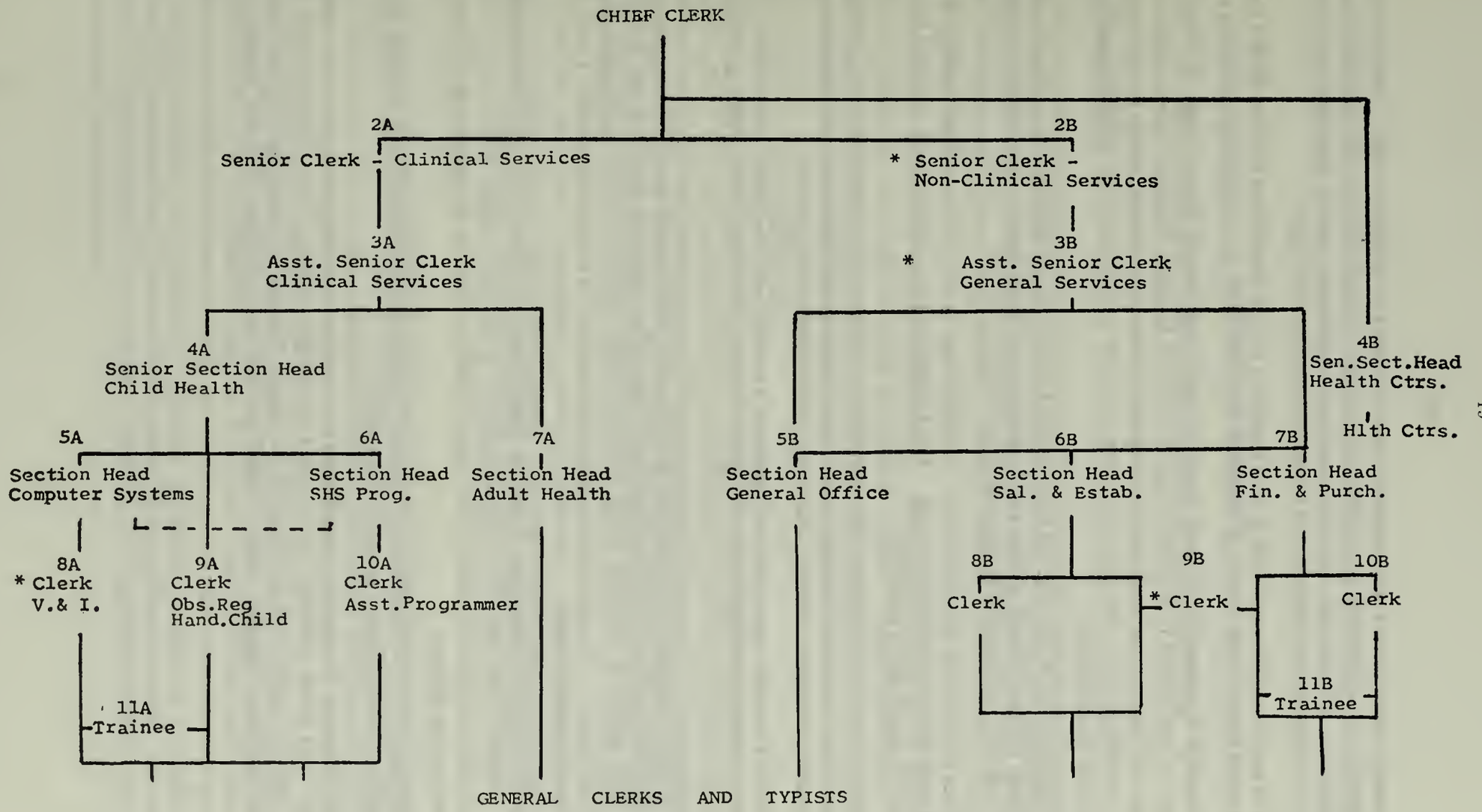
(Section 21, National Health Service Act, 1946)

Miss J. Pearson, Senior Administrative Assistant (Health Centres)

The fourth health centre in the County, at Swinneyford Road, Towcester, was handed over on 4th January. The centre was officially opened by Mr. G. J. Roberts, J.P., Chairman of the County Health Committee, on 27th January and the general practitioners commenced working from there on 1st February.

This health centre accommodates the main surgeries of the two group practices although some branch surgeries in surrounding villages will be continued. Local health authority services transferred to the health centre include child health clinics, health education, ante-natal and relaxation classes, speech therapy and hearing assessment sessions. Family planning clinics are run by the general practitioners and it is hoped that at a later date they will conduct their own assessment clinics.

NORTHAMPTONSHIRE COUNTY COUNCIL .. ADMINISTRATIVE STRUCTURE OF HEALTH DEPARTMENT.



* New posts from 1 April, 1971

During surgery hours the treatment room is staffed by a district nurse. Health visitors and district nurse/midwives have office and storage accommodation. The supporting staff, comprising an administrator and part-time clerk/receptionist, provide secretarial and clerical help for the general practitioners and the local health authority staff.

The accommodation provided is very similar to that at the Burton Latimer Health Centre (see Annual Report 1970), the main difference being that there is an additional consulting suite.

Meetings continued to be held regarding the Corby Health Centre, with all interested parties. It was agreed in September that the Oxford Regional Hospital Board would be responsible for planning the whole project comprising community hospital, health centre, day care unit, and alterations to the diagnostic centre with full consultation with County Council staff and general practitioners.

Agreement was reached on the building of a health centre at Rothwell on a site adjacent to the Urban District Council offices, and fronting on to Bridge Street. It is hoped this health centre will be in operation in the second half of 1973.

Loan sanction was obtained for the Irthlingborough Health Centre and the building of this fifth health centre commenced in April. This building will be combined with a County Library and will be completed in mid-1972.

In December, a meeting was held with the general practitioners in Irchester and preliminary agreement was reached on building a mini-health centre which will provide accommodation for local health authority services as well as a general practitioner surgery.

Also in December, agreement was reached at a meeting with the general practitioners on the Queensway Estate, Wellingborough to replace the temporary health centre with a permanent one.

One note of interest is the fact that the Towcester health centre was built opposite an old persons' home, and the activities of the centre have given these old persons a new interest in life. They delight in watching young mothers, babies, children, as well as the older people coming and going. This sort of community area has much to recommend it and is a point that could well be borne in mind.

In the first year of operation, Towcester Health Centre has shown what can be accomplished given goodwill on the part of all who work there. It is a busy, happy health centre with all sessions fully booked and provides a full range of health services for the population of Towcester and surrounding villages.

Developments in technology and transport systems will undoubtedly play a major part in planning and running health centres in the future.

The Daventry Health Centre continued to expand its activities in all spheres, i.e. general medical, local health authority and hospital out-patient services. As in previous years, this centre, like the smaller ones at Towcester and Burton Latimer, attracted many visitors from all parts of the United Kingdom as well as from America, Finland, Spain, India and Malaysia.

CHILD HEALTH

Dr. V. V. Tracey, Senior Medical Officer for Child Health

1. Assessment centres

The setting up of assessment centres at which children found on screening to show developmental retardation could have more intensive examination was advocated in the Report of the Sub-Committee on Child Welfare Centres (Sheldon Report) 1967 and with the growth in interest in the developmental approach to paediatrics, has been receiving attention from hospitals as well as local authorities.

There is obviously a need for more than one type of assessment centre as the assessment procedure is likely to vary with the needs of different children. Some children need to be submitted to highly specialized diagnostic procedures which can only be provided in hospital. Many more children can be efficiently assessed by members of the local authority team such as medical officers experienced in developmental paediatrics, speech therapists, educational psychologists, and teachers of the deaf.

When premises became available at 18a Oxford Street, Wellingborough, this was seen as an opportunity to start an assessment centre to which children could be referred for unhurried assessment away from the rather more formal atmosphere of a clinic. Unfortunately the rooms selected for this use were not available to the Health Department until November when the first session was held under the supervision of a medical officer with wide experience of child development.

From this small start it is planned to develop a number of other assessment centres in each of the main population centres of the County. Medical officers and health visitors have been invited to bring forward the names of children suitable for referral to the centres.

2. The observation register

An attempt has been made to look at the efficiency of the observation register in providing a mechanism for the early detection of handicapped children. The present register, combining a high risk register with a register of handicapped children has been in existence since 1968. In this year the observation register on computer tape was initiated and the old " at risk " register was revised and set up in index card form.

Both sections of the register are subject to constant review, cases are removed from the current list when it is considered that progress is satisfactory and names are added when new developments indicate that there is a need for intensive observation because of the risk of a handicapping condition. The majority of children, whose names appear on the register are reviewed at least once a year. Sometimes the interval is longer than one year if, for example, the condition under surveillance is one which is unlikely to be of significance until the child is of an age to start attending school.

Children born before 1968

The section of the register dealing with children born before 1968 and now almost all attending school has been analysed to show how many children remain on the current list and how many have been ascertained as needing special education.

	1964	1965	1966	1967
Total number of entries	266	316	353	307
Removals from the register	52	52	52	33
Deaths	8	5	6	4
Transfers out of the County	10	15	25	30
Lost trace	9	7	13	10
Current cases	187	237	257	230
Ascertained as in need of special education ...	69	52	39	34

Age on admission to the register

Many of the children with records in this part of the Observation Register were originally on the " at risk " register, and their age on notification as babies " at risk " was recorded on the index cards of the observation register when it was set up in 1968. The age at registration has been analysed for all current cases.

Age in months at registration

	Under one	1-3	3-6	6-12	12-18	18-24	*Over* 24
1964	18	55	15	7	4	3	86
1965	1	82	6	6	9	2	131
1966	2	89	18	13	1	10	124
1967	5	68	18	9	24	26	80

It is immediately apparent that the majority of registrations under the age of one year fall into the age group one to three months and only for children born in 1967 is there any real evidence of children's names being added to the register during the second year of life. This is largely due to the fact that the observation register was being set up during the second half of 1968 and this brought more children to light at a younger age. It is unfortunate that the record card in use does not provide for an easy recording of the age at entry over the age of 2 years, hence the very large numbers in this category.

The smaller groups of children ascertained as in need of special education have been analysed in the same way.

Age in months at registration

	Under one	1-3	3-6	6-12	12-18	18-24	*Over* 24
1964	10	19	5	1	3	1	31
1965	—	17	4	4	—	—	27
1966	—	8	2	2	—	7	20
1967	2	5	2	2	3	5	15

Late admissions to the register

It could be said that the large numbers of children not recorded on the observation register until they were over 2 years old indicated an inefficient detection system and many missed cases in the early months of life. The record cards were scrutinised to see what reasons there were for late entry to the register. Two headings chosen for this classification were movement into the County with direct admission to the register and those children whose illness, or other circumstances needing observation did not arise until they were over 2 years old. The remainder were divided into those who might have been detected earlier by an ideal screening programme and those who were known about earlier but through lack of communication were not notified.

	1964	1965	1966	1967
Transfers in	16	24	30	27
Illness starting over age of 2 years	38	55	50	23
Late admissions avoidable by better screening	11	19	28	23
Due to poor communication	21	33	16	7
	86	131	124	80
Percentage of current cases	46%	55%	48%	35%

These figures underline the need to supplement any risk register procedure with a programme of population screening in order to detect children with defects.

One of the problems in operating an observation register is to keep it small enough in size to facilitate regular review of the cases, but large enough not to miss cases. Reviewing all the years of keeping a register of children at risk of handicapping conditions there has been a drastic reduction in the size in the second half of the period.

	Live births	*" At risk " register*	*Observation register*	*Cases being observed at present*
1964	5,937	1,601 (26·9%)	266*	187 (3·1%)
1965	5,755	1,524 (24.7%)	316*	237 (4·1%)
1966	5,684	1,358 (23.8%)	353*	257 (4·5%)
1967	5,611	1,255 (22·4%)	307*	230 (4·1%)
1968	6,030		921 (15·2%)	335 (5·5%)
1969	5,974		630 (10·5%)	358 (5·9%)
1970	5,983		771 (12·8%)	564 (9·4%)
1971	6,350		751 (11·8%)	624 (9.8%)

*Transferred from " at risk " register at 1968 review

(The current cases have been expressed as a percentage of the live births for the year on the assumption that transfers in are approximately equalled by the numbers transferring out.)

It will be necessary to keep a close watch to see that the policy of a smaller high risk register, supplemented by a screening programme is fulfilling its objective of the early identification of children in need of special attention.

3. Play leadership

Dr. F. R. N. Lynch, Medical Officer in Department

As the theme of this report is " Trends in the Health Service ", a note on play leadership in Corby is included here.

The interest of the Urban District Council of Corby in play leadership was first aroused by the National Playing Fields Association and the scheme was launched in the Summer of 1959.

The general aim is towards free play as distinct from organized games, although it is recognized that some team games are necessary and are indeed particularly popular with the older children.

From small beginnings, there has been a steady and persistent growth both in the number of play centres organized and the number of children participating, until it may be said that play leadership in Corby is well and truly established and its future secure.

The object of the scheme, broadly speaking, is to attract children to the parks and open

spaces and to encourage them to play their games there rather than on the streets and properly maintained equipment is provided, both indoors and outdoors.

The scheme is operated on a sessional basis, and sessions are held daily during the school holidays as follows: Monday to Friday 10 a.m. to 12 noon, 2 p.m. to 4 p.m. and 6 p.m. to 8 p.m. Saturdays, 10 a.m. to 12 noon and 2 p.m. to 4 p.m. During term time evening sessions are held from 6 p.m. to 8 p.m.

The ages of the children range from 5-14 years.

There are three types of play leadership site:

(1) Open all the year.
(2) Open Easter to September.
(3) Open during the Summer holidays.

In each type of site there are four to six centres situated in different parts of the town. It is planned to open further centres during 1972.

Activities include dancing, judo, swimming, football, netball, tennis and physical training and instruction is given by qualified coaches. Attendance is good varying from 100 children attending the dancing classes each week to 300 taking part in the Sunday Streets Football League.

One O'Clock Clubs. These clubs are for mothers and their pre-school children. There are five clubs in the town. The object is to give mothers the opportunity to meet each other.

In the One O'Clock clubs the children can be safely left to play and mix while the mothers make new friends.

4. Welfare foods

At the end of the year there were 114 centres of which 106 were voluntary, including child health clinics. The full-time centre at Northampton as well as part-time centres at Corby, Kettering, Rushden and Wellingborough are manned by County Council staff. In addition, food is sold from the mobile clinics. The remaining centres are manned by voluntary workers who distribute foods from their houses, shops and child health clinics, and a debt of gratitude is due to these volunteers for their continuing good work.

5. Mobile Health Clinic

One of the main problems of this department in providing services is ensuring that rural areas receive the same standard of service as the urban areas, and that the needs of small and often remote villages are met.

In 1962, a step was taken towards overcoming these difficulties by the provision of a specially built caravan, fully equipped to operate as a mobile clinic. Many of the smaller villages in the county are visited each month by the mobile clinic, and a child health clinic is held. In addition, the vehicle used for towing the clinic is equipped with seats, and mothers and children are collected from the surrounding areas.

To extend the services for both children and adults a new caravan was commissioned and built to specification by a specialist firm. This clinic was completed at the beginning of November and the Chairman of the Health Committee, Mr. G. J. Roberts, J.P., invited members of the

press to a preview of the clinic at the Towcester Ambulance Station on 2nd November, after which it remained for the following day to enable members of the public to look over the caravan. Interest was also shown by other local authorities whose medical officers of health came to see the clinic.

The clinic will provide an ideal environment for medical examinations, developmental screening of children, cervical cytology, family planning and other screening procedures in the rural and other areas of the county.

Experience gained in the operation of a mobile clinic over the past nine years was of great value in designing this second caravan which has an all-steel frame and chassis and is fully insulated with double glazed windows. Safety features include an emergency exit and a power braking system. The interior is divided by sliding doors into three sections, a doctor's consulting room, a health visitor's room, and a waiting area, and has white melamine faced walls and teak furniture. The fittings include built-in cupboards, desks, sink units and handbasin with hot and cold water, refrigerator and an adjustable examination couch.

CHILD HEALTH STATISTICS AND TABLES

TABLE I

Premature infants

(Birth weight 5½lbs or less, irrespective of gestation period.)

	1971	1970	1969	1968
Premature live births				
Born in hospital	401	364	336	398
Born at home	9	37	30	30
	410	401	366	428
Premature stillbirths				
Born in hospital	47	38	50	39
Born at home	—	1	2	4
	47	39	52	43
Total live and stillborn premature births ...	457	440	418	471
Percentage of total live and stillbirths ...	7·2	7·2	6·9	7·7

TABLE II

Infant deaths

Notifications were received of 70 deaths under four weeks of age and 42 deaths of babies aged four to 52 weeks. Of the deaths in the first month of life 54 (77.2%) occurred in the first week and 32 (45.7%) survived for less than 24 hours. The majority of these very early deaths were due to extreme prematurity and low birth weight, multiple pregnancies contributing a number of deaths to this group.

Deaths under one year of age

Under one month	*Age in months* 1	2	3	4	5	6	7	8	9	10	11	*Total*
70	3	8	9	5	5	2	4	1	3	1	1	112

The causes of death under the age of one year are analysed in the following table.

1. Deaths under 4 weeks of age			
Prematurity		22	
Congenital malformations		17	
Prematurity and respiratory distress syndrome ...		7	
Prematurity associated with other conditions ...		6	
Respiratory distress syndrome		5	
Cerebral haemorrhage		2	
Anoxia/asphyxia		5	
Neonatal infections		3	
Meconium aspiration		1	
Rhesus incompatibility		1	
Precipitate delivery		1	
		——	70
2. Deaths between 4 and 52 weeks of age			
Respiratory infections		19	
Acute bronchiolitis	9		
Broncho-pneumonia	5		
Virus pneumonia	2		
Pneumonitis	2		
Acute tracheo-bronchitis	1		
Other infections...		5	
Congenital malformations		9	
Fibrocistic disease		3	
Wernig Hoffman disease		1	
Intestinal obstruction		2	
Intersusception		2	
Haemolytic uraemic syndrome		1	
		——	42
			112

TABLE III

Analysis of the observation register

At the end of the year there were 1,881 children on the computerised section of the observation register, and of these 335 were born in 1968, 358 in 1969, 564 in 1970 and 624 in 1971.

During the year, 39 children whose names were on the register died, 32 moved out of the County and 56 were considered to be developing normally, and their names removed from the active file.

The following table is an analysis of the categories relating to the children on the observation register:

Analysis of observation categories	1971	1970	1969	1968	Total
Gestation period less than 36 weeks and birth weight under 4½lbs ...	36	48	38	19	141
Birth weight under 4½lbs, but gestation period more than 36 weeks ...	46	32	20	24	122
Gestation period less than 36 weeks but birth weight more than 4½lbs ...	49	62	43	22	176
Gestation period more than 42 weeks ...	20	11	15	18	64
Jaundice—more than 20mgm% ...	8	7	9	4	28
Birth asphyxia	18	20	23	14	75
Respiratory distress, cyanotic attacks ...	1	2	7	10	20
Congenital malformations	53	63	52	38	206
Other	393	319	151	186	1,049
	624	564	358	335	1,881

TABLE IV

Congenital malformations observable at birth

During the year, 98 babies were reported as having a total of 110 abnormalities, twelve having more than one abnormality. Fourteen babies were stillborn and 17 subsequently died.

CENTRAL NERVOUS SYSTEM

Anencephalus	7
Hydrocephalus	7
Other defects of brain	1
Spina bifida	12

EYE, EAR

Other specified malformations of ear	4

ALIMENTARY SYSTEM

Cleft lip	4
Cleft palate	2
Tracheo-oesophageal fistula ...	2
Rectal and anal atresia and stenosis	3
Other specified malformations of alimentary system	2

HEART AND CIRCULATORY SYSTEM

Specified malformations of heart and circulatory system	2
Unspecified malformations of heart and circulatory system ...	4

URO-GENITAL SYSTEM

Indeterminate sex and true hermaphroditism	1
Malformation of female vagina and external genitalia	1
Hypospadias, epispadias	7
Other specified malformations of urino-genital organs	1
Malformations of male external genitalia	1

LIMBS

Polydactyly	2
Syndactyly	4
Reduction deformity hand or arm ...	1
Talipes	21
Congenital dislocation of hip ...	1
Unspecified limb malformations ...	2

OTHER SKELETAL

Other malformations of musculo-skeletal	2

OTHER SYSTEMS

Pigmented naevus	7
Exomphalus, omphalocele	2

OTHER MALFORMATIONS

Down's syndrome	2
Other and unspecified congenital malformations	5

The incidence of congenital malformations has also been analysed by site in the table below which compares the figures with those for 1970 and the national rate.

Where a child had multiple abnormalities of the same generic category (e.g. spina bifida with hydrocephalus; or hare lip with cleft palate) it has been included in the table once only.

Category	*Northamptonshire*				*England and Wales*	
	1971	%	1970	%	1970	%
Central nervous system ...	24	23·3	19	14·9	3,183	22·7
Eye-ear	4	3·9	3	2·3	464	3·3
Alimentary system ...	11	10·6	14	10·9	1,672	11·9
Cardio-vascular system ...	6	5·8	5	3·9	740	5·3
External genitals	11	10·7	8	6·3	942	6·7
Limbs	29	28·2	46	35·9	5,285	37·7
Other	18	17·5	33	25·8	1,733	12·4
Total	103	100·0	128	100·0	14,019	100·0

TABLE V

Sales of welfare foods

	1971	1970	1969	1968
National dried milk (full and half cream)	15,827	27,848	45,460	59,319
Cod liver oil	2,018	4,007	4,222	4,474
A and D tablets	3,790	5,113	4,341	3,930
Orange juice	91,335	94,603	88,444	79,331
Vitamin drops	5,326	—	—	—
	118,296	131,571	142,467	147,054

During the year 12 centres were closed either through lack of demand for foods or for difficulty in finding a replacement distributor.

TABLE VI

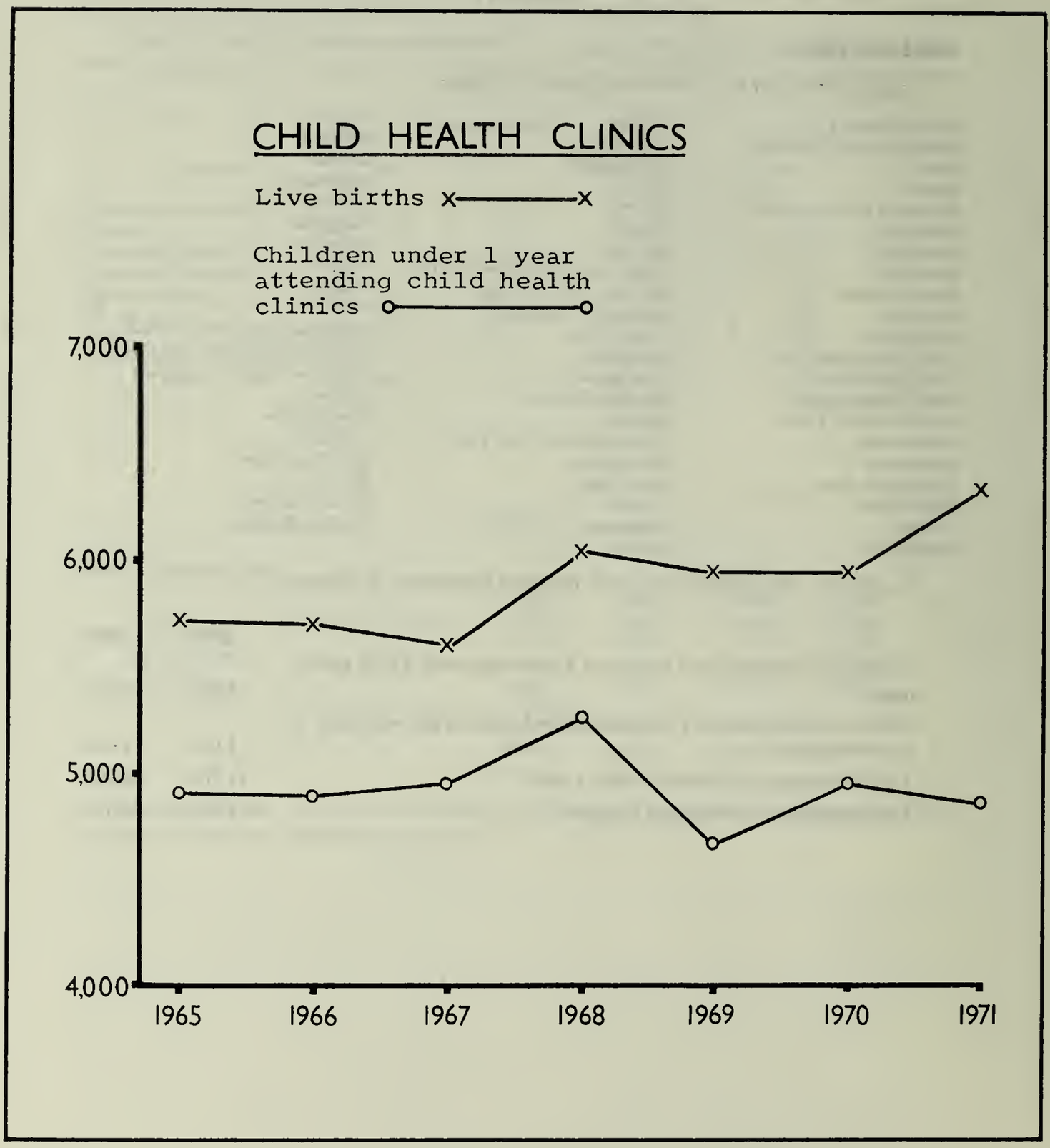
Child health clinics

Sessions were held in the following towns and villages.

Barton Seagrave	Gretton	Roade
Blisworth (from December)	Hackleton	Rothwell
Bozeat	Hardingstone	Rushden
Brackley	Harpole	Silverstone
Braunston (from October)	Hartwell	Spratton
Brigstock	Helmdon	Thrapston
Brixworth	Irchester	Towcester
Broughton	Irthlingborough (St. Peter's Hall)	Weedon
Burton Latimer	Kettering (School Lane)	Weldon
Cogenhoe	Kettering (St. John)	Welford
Collyweston	Kings Sutton	Wellingborough (Oxford Street)
Corby (Pen Green Lane)	Kislingbury	Wellingborough (Queensway H.C.)
Corby (Beanfield)	Long Buckby	Wellingborough (St. Andrews)
Corby (Stuart Road)	Middleton Cheney	Welton
Daventry (from June)	Moulton	West Haddon
Deanshanger	Nether Heyford (from July)	Wollaston
Desborough	Old Stratford	Woodford Halse
Doddington, Great	Onley Park	Wootton
Earls Barton	Oundle	Yardley Gobion
Finedon	Potterspury	Yardley Hastings
Geddington	Raunds	

In addition, the mobile health clinic provided facilities in 39 villages.

	1971	1970
Number of children under the age of 1 year who made a first attendance	4,867	4,940
Number of children over 1 year and under 5 years of age who made a first attendance	1,014	1,454
Total attendance by children under 1 year	41,764	38,764
Total attendance by children 1-5 years	21,378	22,675


CHILD HEALTH CLINICS
Live births
Children under 1 year attending child health clinics
7,000
6,000
5,000
4,000
1965
1966
1967
1968
1969
1970
1971

ADULT HEALTH

Dr. N. Soloff, Senior Medical Officer for Adult Health

1. Introduction

During the year formal and informal discussions regarding the development and co-ordination of community health and social services, in the broadest context, have given rise to opportunities for improved co-operation at all levels, and where possible these opportunities have been taken.

In helping those in medico-social need to live in the community, it is being realised that this cannot be achieved in isolation, and that the best results are obtained when community care is undertaken on the basis of informed co-operation.

There has been a considerable expansion of most services and all services are under pressure from increasing demands made upon them. The family planning and chiropody services are examples of the increasing use being made of health centres in the provision of local health authority services, a precursor to the future integration of health services.

In being concerned with changes in the structure of the hospital and community health and social services, and in the roles and relationships of staff which result from these changes, it is imperative that the patient is not forgotten and receives the best possible service. Every effort should be made to provide a framework in which this is possible.

Care of the elderly

A great deal is done by family doctors, community nursing staff and many others, that goes unrecorded in coping with the difficult and increasing problem of helping handicapped elderly people to live in the community. However, the provision and co-ordination of help varies and it may be that inadequate communication is a factor in some instances.

In an endeavour to close any gaps that inevitably occur in communication, the Adult Health Section has provided an information service in the past year, based upon the hospital discharge letters received regarding elderly patients discharged from hospitals in the county.

During the year, notification of 572 elderly patients discharged from geriatric hospitals has been made to community nursing staff. Of these, 346 patients were 75 or more years of age.

An interim investigation during the year showed that over half of this " at risk " group were known to neither a health visitor or a district nurse. It may be that the family doctor did not consider their involvement necessary, or it may be the result of difficulties in communication.

Further investigations are being undertaken and discussions will be held regarding the need for the passage of this information and the best means of communicating it, whether this be through Departments of Community Medicine, through future Area Nursing Officers in liaison with hospitals, or directly from the hospitals.

An investigation into the possibility of extending this service for elderly patients discharged from Kettering General Hospital, using the services of the Department of Community Medicine, will be undertaken early in 1972.

Handicapped school leavers

Following last year's discussions, there has been continued co-operation between the careers officers and the Health Department in attempting to help handicapped school leavers to find suitable employment. Some of the difficulties encountered are the result of the general employment situation, which has worsened over the year.

Where problems of a medico-social nature have caused or been aggravated by unemployment, reference has been made to the Social Services Department and voluntary agencies for help in resettlement.

The need for sheltered work situations is as great as ever, and all concerned are aware of this need, which it is hoped is receiving consideration.

Although much help is being given to those whose disabilities are obvious and are attending special schools, there is concern for those whose disabilities have been such that they have coped at ordinary schools but whose disabilities may be handicapping to them in obtaining and holding suitable employment. Continued discussions with officers of the Education Department and Careers Advisory Service will be held, to see how best to identify those needing special help and how this help should be co-ordinated.

Until such time as formal arrangements are made for the medical supervision of Adult Training Centres, contact has been maintained with them by this section, which holds the previous school medical records of the trainees. Medical examinations of trainees for contagious skin lesions and prior to swimming sessions have been undertaken.

Convalescent holidays

Responsibility for providing convalescent holidays was transferred to the Social Services Department on 1st April 1971. Medical approval of applications continues to be the responsibility of the County Medical Officer of Health, and is undertaken on his behalf by the Senior Medical Officer for Adult Health.

Medical examinations of council employees

Operational firemen: Periodical examination of operational firemen aged 40 years and over, due to begin in April 1971, was postponed due to discussions held nationally between representatives of the firemen and the Fire Services Administration, on the implications of the scheme. It is hoped to implement the revised scheme early in 1972.

Ambulancemen: Twelve medical examinations were undertaken on ambulancemen appointed to the service, all of whom were found to be fit for their duties.

Pre-employment chest X-rays of council staff: Chest X-rays have been arranged for 273 members of staff appointed to the County Council, in 269 of whom no abnormality was found. The other four X-rays showed old lesions with no evidence of activity.

Medical examination of teachers

Three hundred and fifty-two candidates for admission to teachers' training colleges and to the teaching profession, were medically examined, together with five candidates examined on behalf of other authorities. None was classified as medically unfit to teach.

2. Family planning

There has been continued growth of family planning services in the County since 1967, with an increasingly rapid rise in the provision, and use, of these services in 1970 and 1971.

In 1967, 371 women attended 36 clinics, while in 1971, this had increased to 1,944 women attending 157 clinics.

Of the 1,089 women attending clinics in 1970, 347 were new patients. In 1971, the number of new patients attending had almost doubled to 670. Two-thirds of these patients were referred by family doctors and health visitors who work closely together, and it is clear that health visitors are most able to identify the women most in need of advice.

While the service is primarily for women in medical and social need, to whom the service is free of charge, appointments are made for women not in these priority groups, at most of the clinics. In 1971, of the 670 new patients, 399 (59.5%) were seen for reasons of social need, while 87 (13%) were seen for medical reasons.

In order to plan and expand the service, it was necessary to obtain information regarding the women who do not attend the clinics. The information provided by health visitors indicated that the main problems preventing attendance were primarily subjective difficulties, including lack of interest, fear or religious objections, on the part of the women concerned, although in some cases the practical problem of lack of transport or the care of the children caused difficulties. In order to meet these problems, the extension of the service was planned to include a domiciliary service, providing facilities in their own homes for women who are unable or unwilling to attend the clinics.

As is known to be the case in other family planning services, the commonest methods recommended at the clinics are the oral contraceptive pill and the intra-uterine device, the latter particularly amongst women in social need. Of the 670 new patients, 262 were prescribed the " pill " 193 were fitted with an intra-uterine device. The latter method is being increasingly used.

During 1971, the following increases in clinic facilities were made:

Corby

In view of the considerable time needed to be spent in discussion with some patients about their psycho-sexual problems, a clinic was established for this purpose in July. Nine sessions took place in 1971. To make more effective use of health visitor time, the third Wednesday evening session was converted to a two-doctor session in August. This has proved very successful.

Daventry

An extra monthly session was provided in April.

Rushden

A monthly clinic was established at the health clinic, in August.

Towcester

A monthly clinic was established at the health centre in November.

Wellingborough

An extra monthly session was provided in November.

In July, the Department of Health and Social Security issued circular 36/71 which emphasises the importance of a comprehensively planned service in each area, and looks to local health authorities to provide the necessary co-ordination of planning. This authority has already established a clinic in Kettering which is held on hospital premises, involving close liaison with the gynaecologists. A booklet which provides comprehensive information about the facilities available in this area was published by this department in collaboration with the Department of Obstetrics and Gynaecology of the two local hospitals. In addition, arrangements have been made with the Family Planning Association whereby patients in social or medical need of facilities, seen at their clinics at Banbury, Northampton and Rugby are given free advice, treatment and supplies on behalf of this authority.

Family Planning Service Statistics

1. Clinics and attendances

	Clinics held	*Total attendances*
1967	36	371
1968	50	349
1969	81	464
1970	123	1,089
1971	157	1,944

1971	*Clinics held*	*New patients*	*Re-visits*	*Total attendances*
Corby	52	309	597	906
Daventry	29	129	273	402
Kettering	34	86	163	249
Rushden	5	14	5	19
Towcester	2	15	2	17
Wellingborough	35	117	234	351
Totals	157	670	1,274	1,944

2. New patients

(a) *Referred on—*

	Social grounds	*Medical grounds*	*Non-priority*	*Total*
Corby	161	58	90	309
Daventry	109	20	—	129
Kettering	54	6	26	86
Rushden	11	—	3	14
Towcester	12	—	3	15
Wellingborough	52	3	62	117
Totals	399	87	184	670

(b) *Referred by—*

	G.P.	*H.V.*	*Other L.A. staff*	*Hospital*	*F.P.A.*	*Self*
Corby	55	117	4	6	28	99
Daventry	72	57	—	—	—	—
Kettering	55	9	1	1	1	19
Rushden	1	9	—	—	—	4
Towcester	14	1	—	—	—	—
Wellingborough	25	32	1	—	20	39
Totals	222	225	6	7	49	161

(c) *Treatment received—*	*Oral contraceptive*	*I.U.D.*	*Other methods*
Corby	136	66	149
Daventry	85	27	22
Kettering	7	46	57
Rushden	—	10	7
Towcester	7	3	7
Wellingborough	27	41	67

(d) *Age distribution*

Ages	15-19	20-24	25-29	30-34	35-39	40+	*Unknown*	*Total*
Number ...	77	238	202	82	36	30	5	670
% of total	11·5	35·4	30·2	12·2	5·4	4·5	0·8	100

(e) *Parity*

Parity ...	0	1	2	3	4	5	6	7	8	9+	*Unknown*	*Total*
Number ...	102	97	205	149	70	24	7	4	5	3	4	670
% of total ...	15·2	14·5	30·6	22·2	10·5	3·6	1·0	0·6	0·8	0·4	0·6	100

(f) *Marital status*

	Married	*Separated*	*Widowed*	*Divorced*	*Unmarried*	*Unknown*	*Total*
Number ...	572	20	2	2	71	3	670
% of total ...	85·4	3·1	0·3	0·3	10·5	0·4	100

3. Cervical cytology

This service is provided for women of all ages at cytology clinics and family planning clinics in Corby, Daventry, Kettering, Northampton, Rushden, Towcester and Wellingborough. Facilities have also been provided in the mobile health clinic, and during the year the clinic visited two villages where 81 women received smear tests. The use of the clinic makes facilities available to women who, because of lack of transport and other difficulties, would be unable to attend the main clinics. The new mobile clinic, which was completed in November, has been specially designed for use for cervical cytology purposes and will be used to extend the provision of this service, not only in the remote villages, but also at factories and other establishments employing large numbers of women.

In November, details were received from the Department of Health and Social Security of the national recall system, whereby women will be sent reminder letters to attend for a repeat test, five years after the last examination.

The Cytology Department at Kettering General Hospital is no longer able to provide statistics comparable with those given in last year's Annual Report. Table VII shows the number of smears taken in the County as a whole compared with those taken in health department clinics, the results of which are shown in Table VIII.

TABLE VII

Cervical cytology statistics

Year	*Smears taken in County*	*Smears taken in Health Department clinics*
1969	14,343	952
1970	15,545	1,084
1971	17,581	978

TABLE VIII

County Council clinics—results

Results				*Total*
Negative	*Treatment required*	*Equivocal result*	*Positive*	
882	67	28	1	978

4. Provision of medical and nursing equipment

The number of items issued by the Department under this scheme again increased and during the year a total of 3,593 loans were made. The majority of these requests for items were met within 48 hours and in cases where the request was classed as urgent, most of the equipment was supplied within 24 hours.

Obtaining the return of equipment on loan to patients continues to be a problem. A scheme has been developed, whereby the continued need for expensive items is assessed to ensure that patients are receiving the full benefit of the equipment with which they have been provided.

During 1971, all the hoists issued by this Department were serviced by an engineer from the manufacturer's calling at the addresses of the patients and servicing the hoists, thus ascertaining that all hoists were guaranteed for safe loading and correct function.

The demand for ripple beds increased during 1971 and at the end of the year, six of these were on loan to patients in the County.

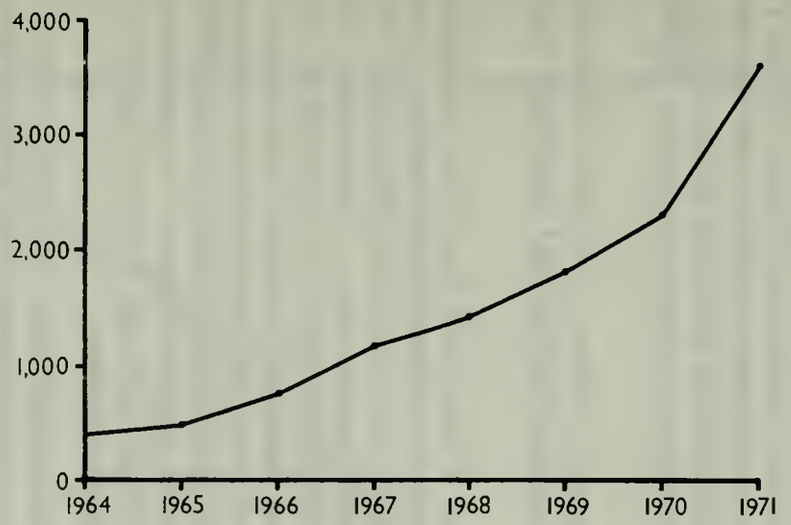
Table IX compares the number of items issued during the year compared with 1970. The following charts illustrate the total number of loans issued since 1964 ; detailed information on loans which aid the mobility of the patient ; the cost of the service over the past four years.

TABLE IX

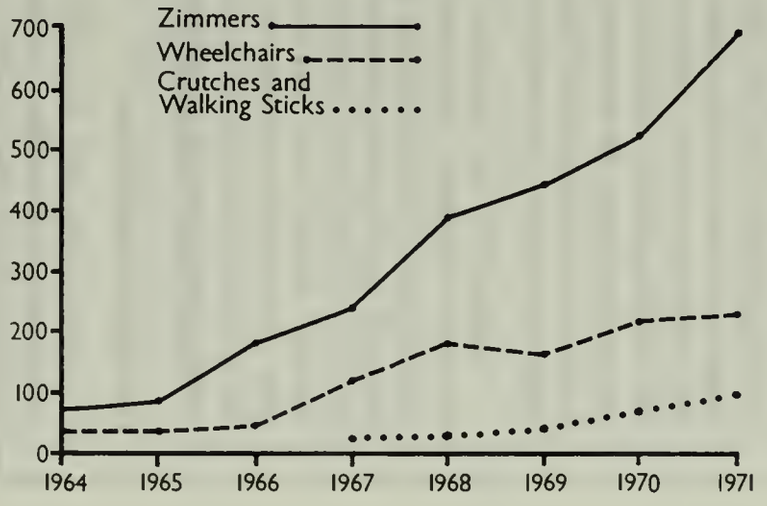
	1971	**1970**
Back rest	240	188
Beds	41	29
Bed pans	152	122
Commodes	518	376
Cradles	190	155
Crutches and walking sticks ...	97	70
Foam rubber rings	229	165
Hoists	16	5
Lifting poles and chains	41	31
Mattresses	41	18
Toilet aids	175	47
Tripods	116	70
Urinals	111	100
Wheelchairs	228	217
Zimmers	698	524
Miscellaneous items	701	149
	3,594	2,256

PROVISION OF MEDICAL AND NURSING EQUIPMENT

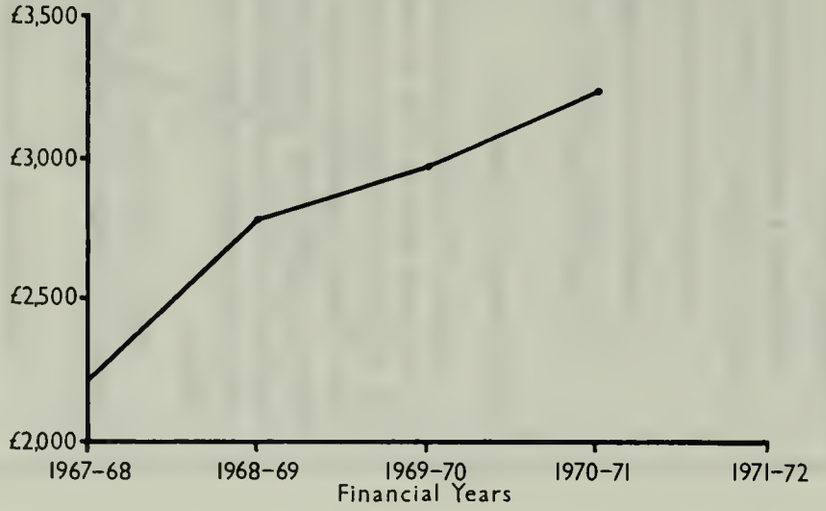
Total Items of Medical and Nursing Equipment Provided 1964–1971



Aids to Mobility Issued 1964–1971



Cost of Medical and Nursing Equipment



5. Chiropody service

Following a survey of the chiropody service in the latter part of 1970, the programme set out below was planned for 1971.

1. An extension of the service to areas at that time not covered.
2. Consolidation of the present service.
3. Chosen liaison between the chiropodists and chiropody scheme organisers.

(i) Extension of service

During 1971 there was a marked increase in the number of voluntary committees providing a chiropody service—123, as compared with 98 for the two previous years. This increase in the main can be attributed to the fact in all areas where it was considered there was a demand, direct contact was made primarily with the Women's Institute and Women's Royal Voluntary Service organisations, seeking their assistance in organising a service in this way and also by working in close co-operation with the Northamptonshire Association for the Elderly. It has often been possible to speak to and so directly promote the service at meetings of clubs for the elderly.

There is little doubt we are fast approaching a position in the County where most of the towns and villages that warrant an individual service due to size and demand are being catered for.

This, however, leaves a very large number of areas which due to their size and the small number of people in each case, makes it impractical to organise a special service. The provision of treatment to people in these areas, must in many cases, be on a domiciliary basis, even though an established clinic may be operating in a neighbouring village. The transport difficulty is often impossible to overcome with the result that in such cases one is faced with the alternative, regardless of the patient's fitness, of providing domicilary treatment, or no treatment at all. This of course, under the present system means an increase in the cost of providing treatment, both to this authority and also the patient, the latter due to the fact that most club organisers levy an extra charge for treatments carried out on a domiciliary basis. This particular problem is also very often aggravated by a certain reluctance on the part of service organisers to include people from outside their own area on their list for treatment.

During 1971, this department received an average of eight requests per month to provide chiropody treatments; this shows an increase of approximately 100% over the figure for the previous year. The majority of these came from general practitioners and district nurses, and many fell into the above mentioned category of having to be provided with treatment in their home due to lack of local facilities. In all cases it was found possible to arrange for treatment. However, should this increase continue, the only practical way of ensuring adequate coverage of these areas would be by the use of full-time chiropodists working with this Department. In this way, little if any extra cost would be incurred in providing a service to these areas, which without doubt, must be deeply involved in any future extension.

Chiropody in health centres

On 29th July, 1971, the first chiropody service operating in a health centre in Northamptonshire came into operation; at Towcester. It is proposed next year to make further use of the facilities at health centres as they are ideally suited to this purpose.

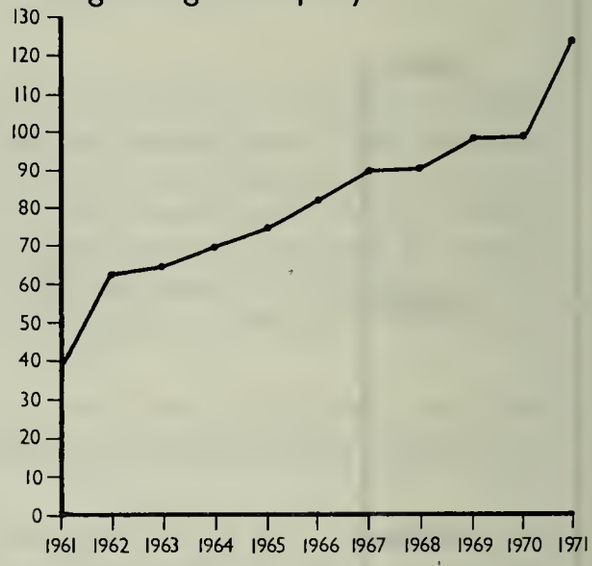
CHIROPODY

TREATMENTS GIVEN

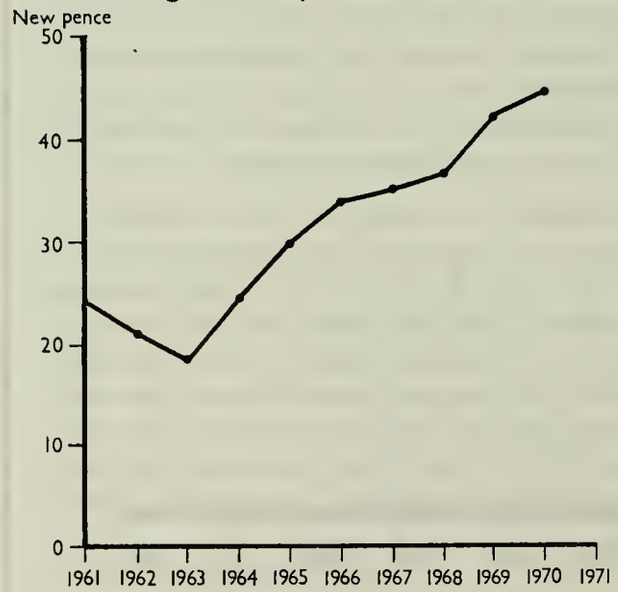
CHIROPODY

Cost

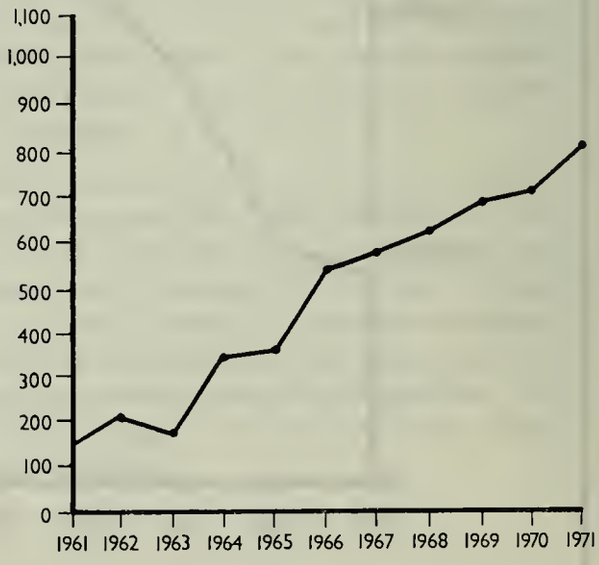
Number of Voluntary Organisations organising Chiropody



Average Cost per Treatment



Claim Forms Received



(ii) Consolidation of present service

During the latter part of 1970 it became increasingly apparent from discussions with voluntary organisers in certain parts of the County that there was a very real danger of some of the larger chiropody services, Kettering, Wellingborough, etc., breaking down. The main problem was one of finance brought about mainly by the extremely large numbers catered for. Meetings were arranged between the parties concerned and after discussion certain amendments were agreed, which in effect relieved the voluntary committees in these areas of any future financial responsibility for the scheme. This has been in operation now for the past seven months and to date no major problems have arisen. A great deal of interest has been shown towards this revised scheme by smaller clubs which can and often do experience the same difficulties, but on a smaller scale. With this in mind plans have been formulated to extend these revisions to the County scheme as a whole.

(iii) Liaison between chiropodists and clubs

During the past year, every opportunity was taken to encourage voluntary committees to contact this Department, should any problems arise concerning their service. In this way it has been possible to arrange for a chiropodist for all the newly formed clubs during the year, and also to arrange for replacements in several cases where the chiropodist has been unable to continue with his commitments.

It has also been possible in adapting this policy, to advise both chiropodists and organisers involved in the scheme on a variety of problems concerning the service.

6. Occupational therapy

Discussions are being held with the Social Services Department regarding the role and functions of the occupational therapists employed by each department.

In the meantime the three Health Department occupational therapists have continued to provide a service to patients in the community, using the resources of both departments, and providing help with the rehabilitation of patients suffering acute and chronic disability.

Good relationships have been developed with nursing staff, family doctors and hospital occupational therapists, and close liaison is maintained with the Departments of Community Medicine at the hospitals, and with the medical loans section, through which an increasing number of patients are referred for assessment.

Reference is made in the section of this report dealing with the Department of Community Medicine at Northampton General Hospital to the scheme for assessment of patients referred for Department of Health and Social Security invalid chairs and cars, which has been undertaken by the occupational therapists since September, 1971.

From 1st April responsibility for the mentally ill or subnormal patients was transferred to the Social Services Department. The occupational therapists have continued to see all patients for an initial assessment but, where appropriate, the case is transferred to the Social Services Department.

The Desborough and Thrapston clubs remain as active as in previous years. Coach outings and mystery tours during the summer months, talks, film-shows, bazaars and parties during the winter months were organised.

Staff visits were made to the " Disabled Living Foundation ", Kensington, in May. The Artificial Limb and Appliance Centre, Nottingham, in November.

Talks were given to the nursing aides at Stockburn Memorial Home, Kettering in August on " Aids for Daily Living " followed by a talk on " The Transition of Occupational Therapy " to " The Fellowship ", Rothwell in September.

7. Haemodialysis

During the four years that the Health Department has been responsible for installing renal dialysis machines, a total of 14 machines have been installed in patients' homes.

The number of patients requiring home dialysis is relatively small but to enable the maximum number of patients to be trained in home dialysis it is essential that there should be as little delay as possible between the time the patient completes training and the completion of home adaptations or the installation of the cabin. In Northamptonshire, delay has been cut to a minimum and as soon as information is received from the hospital that a patient has started dialysis training, plans are put in hand for installing the machine and all the work is completed by the time the patient is discharged home. This is achieved by co-operation between the Hospital Board's Dialysis Organiser, the County Architect's Department, and the Health Department working together as a team to ensure that all delays are reduced to a minimum. In addition the fullest co-operation is always received from the district councils regarding planning permission when this is necessary, from the water boards who ensure that an adequate water supply is available and the electricity boards who endeavour to maintain a supply in all circumstances.

Certain difficulties arose early on and following discussions with the County Architect, it was decided that the solution would be to have a prefabricated cabin built to specification and installed in the garden. The first cabin took six weeks to build and was installed early in January 1970; a second cabin was completed about one month later. Following the success of these prototype cabins it was seen that although the cabins were more expensive to build there was always the possibility that a patient may receive a transplant, move house or die, and, if a cabin were provided it could be moved and used for other patients. It was decided that in appropriate cases cabins would be provided. Only one case was referred during 1970 but other difficulties arose as it was not possible to provide a prefabricated cabin owing to difficulty of access, so in this case a sectional building, which was erected on site, was provided. This structure which is constructed in cedarwood has again proved highly successful, and has a covered access to the patient's home.

During 1971 a further four patients have been referred. In three cases, a cabin has been provided and in the fourth case a room has been adapted.

The following table gives an analysis of the dialysis cases in Northamptonshire.

		Type of installation			*Position in* 1971		
Year	*No. referred*	*Room*	*Prefab. cabin*	*Sectional cabin*	*Died*	*Trans-plant*	*Under dialysis*
1967	1	1	—	—	—	1	—
1968	4	4*	—	—	2	1†	2
1969	4	2	2	—	1	—	3
1970	1	—	—	1	—	—	1
1971	4	1	2	1	—	—	4
Total	14	8	4	2	3	2	10

*In one case a brickbuilt extension was provided. †This patient had a transplant and subsequently died.

NURSING SERVICES

HEALTH VISITING, HOME NURSING AND DOMICILIARY MIDWIFERY

Miss V. M. Greenham, Chief Nursing Officer

1 Introduction

In reviewing the work of the nursing services, two striking features emerge: firstly, an increasing emphasis on care in the community wherever the specialist services of the hospital are not called for and, secondly, a concerted effort to achieve a high standard of continuity of patient care. True continuity of care requires co-ordination of health and social services, in hospital and the community, and here the health visitor has a key role to play. The integrated National Health Service should facilitate co-ordination of medical and nursing care but, meanwhile, nursing staff have been busy building bridges, in anticipation of the appointed day.

Preparation for introduction of the new senior nursing management structure, with decentralisation to area offices, has been an important feature of 1971. Other developments with implications for nursing have included the continued expansion of population and the widening range of duties carried out.

2. Staffing

Recruitment has been satisfactory in all fields. There has been a high incidence of prolonged sick leave which has been a strain on the fieldstaff and has demanded considerable management skill in redeployment of staff. The staff are to be congratulated on the way they have cheerfully carried out extra duties so that the service could be maintained at a high standard.

The Superintendent Nursing Officer, Miss N. Taylorson, retired in October after 11 years service with this authority and her duties were reallocated pending introduction of the revised management structure.

(a) *Establishment*

Chief Nursing Officer

Superintendent Nursing Officer	Superintendent Health Visitor
Deputy Superintendent Nursing Officer	Assistant Superintendent Health Visitor
Two Assistant Superintendent Nursing Officers	Six Group Advisers (Health Visitors)
114 District nurses and midwives	62½ Health Visitors (including 5 school/clinic nurses)
4 Nursing Aides	

TABLE X

31st *December*	*Population of County (estimated mid-year)*	*Establishment*			*Ratio of staff to population*	
		Group advisers, health visitors and clinic nurses	*Nurses and midwives*	*Nursing aides*	*Health visitors*	*Nurses and midwives*
1967	311,990	54			1:5,777	
1968	321,120	55			1:5,839	
1969	330,160	58½	108		1:5,643	1:3,057
1970	338,620	63½	114		1:5,332	1:2,970
1971	341,235	67½	114	4	1:5,055	1:2,993

The staff/population ratios may be contrasted with those recently recommended by the Department of Health and Social Security in Circular 13/72 viz.:

Health visiting (excluding school nursing)	...	1:3,000 to 4,600
Home nursing (excludes midwifery) ...	...	1:2,500 to 4,000

With the increasing volume of work engendered by health centres, and the development of a dynamic family planning policy, serious consideration will need to be given to rectifying this situation.

(b) *Senior management structure*

In accordance with the recommendations of the Working Party on Management Structure in the Local Authority Nursing Services (Mayston Report), the nursing structure was reviewed and the main proposals were:

(i) decentralisation of certain nursing functions to four area Offices.

(ii) co-ordination at area level of the health visiting, home nursing and domiciliary midwifery services by an Area Nursing Officer, who would be supported by three Nursing Officers each of whom would be responsible for units of field staff of the same discipline.

Following consultation with the advisory team from the Department of Health and Social Security, the proposals were accepted in principle and the first phase of the revised structure is to be introduced on 1st April 1972.

Preparations for these changes have included area staff meetings and discussions, in-service training on management and attendance of fieldstaff and others at management courses. The talks included one by Mrs. E. G. Boyd, a member of the Departmental advisory team.

(c) *Group practice attachment*

The policy of establishing community nursing teams to work with families on general practitioners' lists has been continued and the percentage now working in attachment schemes is:

Health visitors ...	...	...	90%
District nurses ...	...	...	93%
District nurse/midwives	...	...	87%
District midwives	...	...	96%

3. Educational activities

The wide scope of educational activities reflects increasing and changing training needs. Staff have appreciated being able to share Study Days with colleagues from neighbouring authorities and local hospitals.

(a) *Refresher courses*

Nine health visitors and nine midwives attended refresher courses. One midwife who resumed midwifery practice after a break of 21 years, spent two months at Horton General Hospital on a practical refresher course.

(b) *Management courses*

Management courses, including training for integration of the Health Service, constitute an increasing part of the in-service training programme. Five health visitors and three nurse/midwives attended First-line Management Courses and senior staff attended special courses on personnel management, selection and recruitment, as well as the management course arranged by the Clerk of the Council at Leicester University Centre. One of the senior staff took part in a multidisciplinary course on Integration of the Health Service and another on the value of " Research in Top Management ".

(c) *Teaching*

With the increasing need for staff to participate in teaching, two more health visitors trained as field work instructors and six district nursing sisters qualified as practical work instructors. Health visitors and midwives also attended the annual four-day course to assist them in teaching relaxation and parentcraft to expectant mothers. One of the senior staff attended a QIDN course for nursing officers teaching student district nurses. A health visitor was sponsored to the Community Health Tutor's Course at the RCN College of Advanced Nursing Education.

(d) *District nurse training school*

Senior nursing staff continued to organise and tutor the District Nursing Training School. Two courses were held and all 23 candidates, including nine sponsored by neighbouring authorities, were awarded the National Certificate. In-service training was given to Practical Work Instructors.

(e) *Clinical education*

One midwife attended a Practical Teaching Course in preparation for the diploma course in " Advanced Midwifery and Clinical Teaching ". Two more health visitors received Family Planning training, making a total of 20 health visitors and one midwife qualified in this field. Eleven others undertook the theoretical course, the practical training being delayed because of pressure on limited training facilities.

A further course was arranged for training in audiometric screening, and all health visitors are now so qualified. School nurses were given in-service training covering all aspects of their work.

The in-service training for district nurses at St. Crispin Hospital was continued and a revised scheme, to include health visitors and also colleagues from the County Borough of Northampton, is due to start early in 1972.

Study days covered a broad spectrum of subjects with special emphasis on continuity of care. Conferences attended included Chest and Heart Diseases, Colostomy and Ileostomy

Care, Community Coronary Care, Venereal Disease, Diabetes, Domiciliary Midwifery, and Bereavement.

Five nursing aides were given an induction course on duties not requiring nursing expertise, to prepare them for working in the community nursing team.

(f) *Student training*

(i) Student health visitors

Fieldwork experience was given to six students, including two sponsored by other authorities.

(ii) Pupil midwives

A programme of community care was introduced for 10 pupils from St. Mary's Hospital, Kettering and 11 from Horton General Hospital, Banbury. Observation experience included a wide range of the health and social services, and lectures and tutorials were given by medical and nursing staff.

(iii) Student nurses

Community experience was arranged for student nurses from both Northampton and Kettering General Hospitals and plans were prepared for extension of this experience to meet the requirements of the 1969 G.N.C. Syllabus.

(iv) Nursing staff also participated in training programmes for general practitioner trainees, for Kings Fund Hospital administrators and for new employees of the County Council. The Superintendent Health Visitor has again lectured to residential child care staff.

4. Liaison arrangements

(a) *Links with Kettering and Northampton Hospitals*

Organisational arrangements are but a framework within which people work and working well together depends on a good understanding of each other's functions. Continuity of patient care has been the recurrent theme for joint study days with nursing staff from both the Kettering and the Northampton H.M.C. hospitals, together with colleagues from neighbouring authorities. Representative staff have attended national conferences on this theme, as well as three held at Oxford at the headquarters of the Regional Hospital Board under the auspices of the Chief Nursing Officers (Local Authority) Group and of the Queen's Institute of District Nursing.

The reports on the Departments of Community Medicine reflect the goodwill and better understanding which joint study days have generated. In particular, there was a remarkable increase in referrals by ward sisters at Kettering General Hospital of patients needing visits by district nursing staff. A district nursing sister, Mrs. R. Cuthell, who had previously been a ward sister at the hospital, undertook specific nursing liaison with the staff of Buccleuch Ward and successfully demonstrated the need for increased use of the services of the community nursing team by patients discharged from general wards. A greater awareness of the service offered by the Department of Community Medicine, has spread through the hospital " grapevine ". Ward sisters and community staff communicate direct whenever possible but appreciate the Department's services to facilitate these links.

A health visitor attends the Geriatric Case Conference at St. Mary's Hospital and others are attached to chest, diabetic and venereology clinics in both hospital groups.

The Chief Nursing Officer is a member of the Obstetric and Gynaecological Division (Cogwheel) which was established at Northampton General Hospital.

(b) *Links with St. Crispin Hospital Management Committee Group*

The in-service training district nurses is referred to under " Educational activities ".

The main development during 1971 has been in the field of mental subnormality. Mrs. E. Dixon, Assistant Superintendent Health Visitor, has established close liaison with senior nursing staff at Princess Marina Hospital. Concurrently, discussions were held which resulted in a scheme whereby nursing care of mentally handicapped patients, who spend part of their time at home and part at the hospital, could be shared on a team basis by nursing staff from the hospital and from the community. The scheme commenced in January 1972.

(c) *Midwifery*

Domiciliary midwives deliver selected patients in four general practitioner maternity units and one consultant unit within the County and also Horton General Hospital. The ready co-operation of hospital colleagues in facilitating these schemes has been appreciated.

The booking of beds for expectant mothers requiring hospital confinement on social grounds has continued. During 1971, 2,580 cases were dealt with on behalf of the Corby Maternity Unit, Park Hospital, Wellingborough and the Barratt Maternity Home, Northampton, an increase of 165 compared with 1970.

(d) *Reciprocal arrangements with other local authorities*

Visiting across county boundaries has been extended to a fifth neighbouring authority and arrangements hitherto limited to health visiting now include general nursing and midwifery.

5. Other activities undertaken by the staff

Mrs. P. Antill was elected a councillor for the Corby Urban District Council and Mr. S. Roberts for Kettering Borough Council. Mrs. M. Walker continued to serve on the selection panel for student health visitors at Leicester Polytechnic and Mrs. E. Dixon was tutor to a First Line Management Course held by the Health Visitors' Association. Miss V. M. Greenham was elected Chairman of the Chief Nursing Officers (Local Authority) Group for the Oxford region and Miss F. Taylor was re-elected Chairman of the Northamptonshire Branch of the Royal College of Midwives.

6. Houses

At 31st December, fifteen houses, one house containing three flatlets and three cottages were owned by the County Council. Six houses were rented by the County Council from District Councils and two from another source.

The decline in the demand for accommodation has continued and has necessitated the selling of a further four houses at Brackley, Crick, Chapel Brampton and Burton Latimer and the termination of the tenancy of another in Corby. This trend is due to the increased employment of married staff who have their own home or who do not wish to live in tied accommodation.

7. Transport

(i) Cars

The number of cars in use at 31st December was:

(a) provided by the County Council	77
(b) privately owned	194

(Nursing staff 82: Health visiting staff 52)

the 77 cars provided by the County Council were distributed as follows:

	Part-time	*Full-time*	*Total*
District Nurses	12	19	31
District Midwives	3	6	9
District Nurse/Midwives	1	8	9
Health Visitors	1	9	10
Occupational Therapists	—	3	3
Medical Officers	1	—	1
School Clinic Nurses	5	1	6
Nursing Aides	1	1	2
Spare			6

(ii) Vans

Transit	1
Escort...	1
Land Rovers	3
Speech Therapy Vehicles	2

8. Research

1. *Survey of the work of the nursing services*

(a) A survey of the work of the nursing staff was carried out during the year, the objectives being to examine the effect of the attachment schemes, the concept of the team approach to health care and possibilities for further delegation of duties to lesser qualified staff. The survey also attempted to predict future trends, to detect problems and areas of dissatisfaction so that appropriate action could be taken, and to provide a forum for staff to express their ideas and suggestions for improvements in the service.

163 questionnaires were completed and analysed. The term " attached " was used where staff were attached to one practice only. 60% of the nurses and 58% of the health visitors fell into this category. The remainder were described as " unattached ".

(b) Home nursing

The number of home visits by the attached nurse was 12% higher than those of other nurses. She visited fewer surgical patients since many of these were seen in Health Centres and doctors' surgeries. She derived greater job satisfaction and her skills were better used than those of other nurses. Nevertheless, 31% of her visits required less than full expertise: this compares with 41% for the unattached nurse.

Since the survey, four nursing aides have been appointed and an increasing number of state enrolled nurses and nursing aides will in future be engaged in areas where they can be deployed

within a nursing team led by a state registered nurse. The survey demonstrated that the development of nursing teams attached to group practices has provided a more comprehensive service to the patient but that hitherto undisclosed needs rapidly emerge resulting in increased demands on the skills and time of the nurse.

(c) Midwifery

During the survey period, 32% of deliveries by district midwives were carried out on hospital premises, compared with 15.7% for 1970 and 14.2% for 1969. Midwives reported that these deliveries were more time-consuming than home confinements. They also spent over 22 hours a month each at ante-natal clinics and classes and accepted an ever-increasing number of early discharges from hospital. (See " Comments on statistics ".)

The number of full-time midwives employed was not sufficiently large to show significant differences between attached and unattached staff. A more detailed examination of the work of the domiciliary midwives is therefore planned during 1972. As the service is undergoing rapid changes it is important to monitor the effects of the changing patterns of care.

(d) Health visiting

As a result of attachment, the health visitor was more selective in her home visiting and she saw more elderly patients and families with special difficulties and who needed supportive care. The survey showed that she spent more time at clinics but had more ancillary help available to her. Referrals from general practitioners were doubled and she, in turn, referred more people to other services, both medical and social. Unlike her home nurse colleague, the attachment did not seem to affect significantly the degree of satisfaction she derived from or her attitude towards her work. This difference may be explained by her traditional standing as a practitioner in her own right.

Health visitors reported that 25% of their visits did not require their full professional expertise and 3% did not even require a trained nurse. In many instances it is not, of course, possible to determine beforehand the degree of knowledge and understanding that is likely to be needed in the varied range of visits undertaken by health visitors. Arrangements for typing and other clerical assistance were reported as inadequate by about half of all the health visitors, although " clinic clerks " are provided in some areas. A close watch is being kept to ensure that every opportunity is taken to delegate suitable tasks to lesser-qualified staff and so conserve the skills of the highly trained health visitor.

(e) School/clinic nurses

A short questionnaire was completed by 13 nurses. Their replies indicated the need for more in-service training and this has since been arranged. All but one of these nurses did a small amount of home visiting in connection with their school duties. This category of staff provides not only an essential supportive service for the health visitors but also is a useful recruitment field. Six nurses indicated they would undertake health visitor training if a local course were available.

(f) Comments

Discussion of the findings with the staff was itself a valuable exercise. Suggestions concerning training, liaison arrangements and delegation of duties have been dealt with and the other findings have been used in planning the development of the nursing service.

2. Other surveys

District nursing staff also took part in a national survey of the functions of the state enrolled nurse. This was carried out by the Queen's Institute of District Nursing for the Briggs Committee on Nursing whose report is expected in July 1972.

Health visitors have helped with various research projects which have been referred to elsewhere.

9. Comments on statistics

Home nursing

Tables XI, XII, and XIII and chart on pages 52-55 show home visits have increased by a further 4.8% to 196,507. The actual number of patients visited has fallen marginally but the proportion of those over 65 has risen from 56% to 69%. Visits to this age group are more time-consuming and could not have been undertaken but for the employment of four nursing aides.

With the opening of Burton Latimer and Towcester Health Centres, a sharp rise in the number of nursing treatments at health centres was expected. The increase from 12,825 in 1970 to 23,307 in 1971 represents a very considerable claim on the time of qualified nurses, the establishment of which was not increased during 1971.

Domiciliary midwifery

Tables XIV-XVI on page 53 show the number of patients delivered and the continuing trend towards hospital confinement with early transfer home. Domiciliary midwives delivered 231 patients on hospital premises and undertook their care on transfer home. This was an increase of 100 over the 1970 figure. The total number of deliveries by domiciliary midwives, however, fell from 968 in 1970 (16.8% of the total births) to 886 in 1971 (13.8%).

There has been a further increase in the number of mothers transferred home before the 10th day, rising from 3,941 in 1970 to 4,631 in 1971.

Midwives are attending more antenatal clinics with their general practitioners and most take part in relaxation and parentcraft classes run jointly with health visitors.

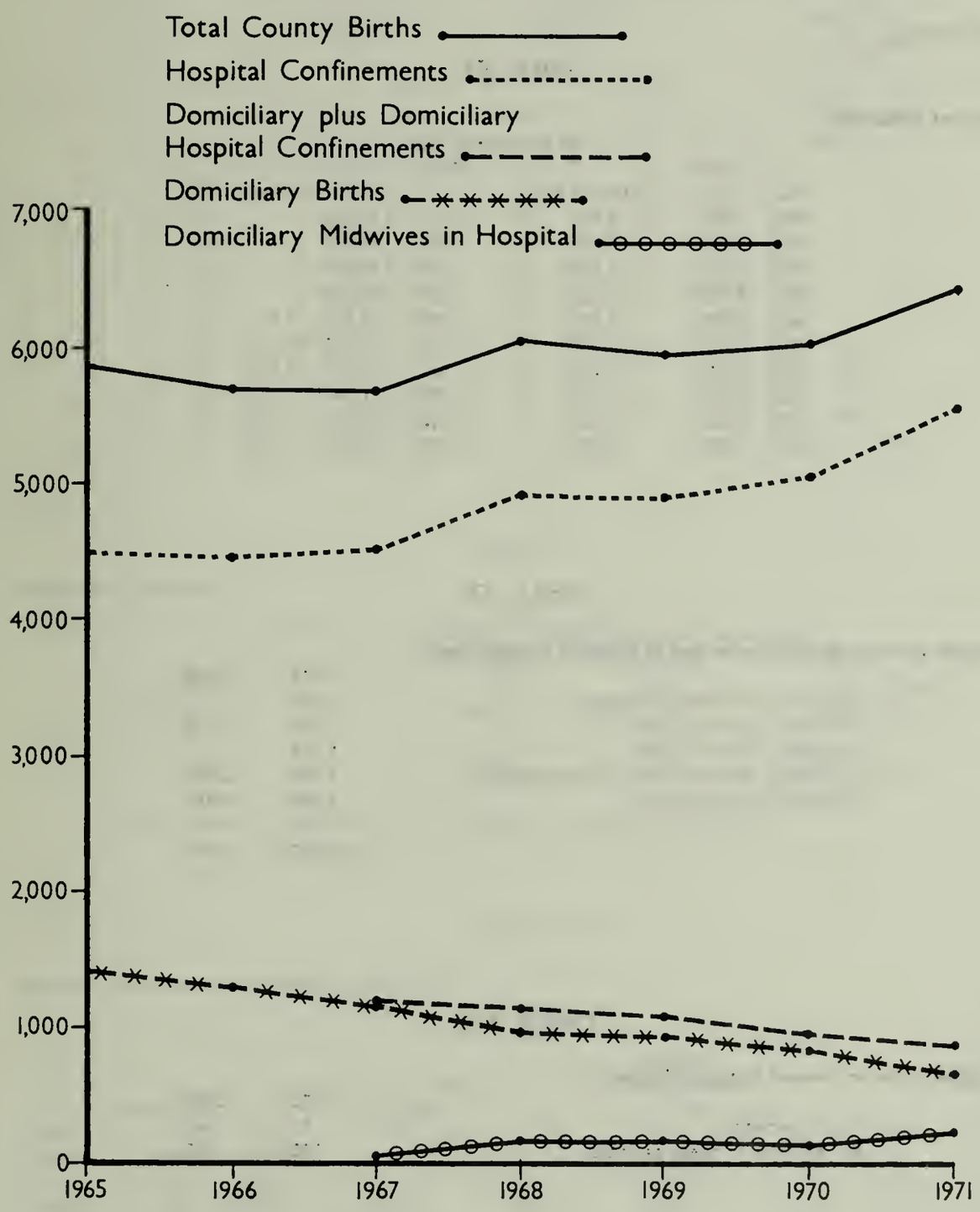
Health visiting

Tables XVII and XVIII on page 54 give details of home visits and of clinic sessions attended.

Home visits have risen by 10% from 76,904 in 1970 to 84,946 in 1971. An increased volume of visits is noticeable both in the 0-5 and in the over-65 age groups. The amount of visiting to the elderly is particularly gratifying, being 34.5% above the 1970 figure and reflecting the advantage to the elderly of the liaison arrangements established with general practitioners and hospitals. There has also been a welcome rise in the follow-up of patients discharged from general hospitals who do not fall in the normal " at risk " groups.

Clinic sessions attended by health visitors have risen sharply during recent years, from 7,126 in 1969 to 11,826 in 1971. This increase is mainly associated with attendance at general practitioner clinics but there is also a significant increase in work in the field of family planning (from 136 to 346) and hearing assessment (from 282 to 612).

STATISTICS OF CONFINEMENTS



STATISTICS

Home Nursing

TABLE XI

Home visits 1962-1971

		At time of first visit			
Year	*Total cases*	*Aged over 65*	*Under 5*	*Total visits*	*% increase*
1962	7,041	3,581	384	142,750	
1963	6,940	3,638	403	139,589	
1964	6,547	3,168	390	141,952	
1965	6,422	3,512	330	138,748	
1966	7,089	3,864	458	143,955	3.8%
1967	7,580	4,171	355	159,395	10.7%
1968	8,846	5,206	494	166,798	4.6%
1969	8,140	5,263	459	171,380	2.7%
1970	9,433	5,288	513	187,490	9.4%
1971	9,304	6,416	567	196,507	4.8%

TABLE XII

Treatments given at Health Centres and at Rushden Medical Centre

	1971	**1970**
Burton Latimer Health Centre	5,172	—
Daventry Health Centre	9,182	8,138
Towcester Health Centre	4,004	—
Queensway Health Centre Wellingborough ...	2,683	2,471
Rushden Medical Centre	2,266	2,216
	23,307	12,825

TABLE XIII

Day surgery, Horton General Hospital, Banbury

	1971	**1970**
No. of patients	51	45
No. of visits to these patients	262	242

Domiciliary midwifery

TABLE XIV

Number of patients delivered by domiciliary midwives during the last ten years

Year	*Doctor not booked for attendance at delivery*		*Doctor booked for attendance at delivery*		Total	*Additional deliveries in hospital by domiciliary midwives*
	Doctor present	*Doctor not present*	*Doctor present*	*Doctor not present*		
1962	12	89	348	1,088	1,537	
1963	8	47	338	1,130	1,523	
1964	9	48	318	1,174	1,549	
1965	3	19	318	1,019	1,359	
1966	4	23	261	968	1,256	
1967	12	25	270	835	1,141	
1968	6	21	231	721	979	155
1969	5	11	223	709	948	157
1970	9	14	196	618	837	131
1971	1	11	98	545	655	231

TABLE XV

Notification of births

The number of births notified, after adjustment for transferred notifications, was:

	Live births	*Stillbirths*	*Total*	
Domiciliary	655	—	655	(10·2%)
Hospital	5,695	69	5,764*	(89·8%)
Total	6,350	69	6,419	(100%)

*Includes 231 babies delivered by domiciliary midwives in hospital.

TABLE XVI

Increasing trend towards hospital confinement

Year	Domiciliary	%	*Hospital* — *domiciliary midwife in hospital*	%	*Hospital (less domiciliary midwives deliveries)*	%	*Total*	*Cases discharged before 10th day*
1965	1,372	23·5	—	—	4,467	76·5	5,839	2,306
1966	1,258	22·0	—	—	4,427	78·0	5,685	2,432
1967	1,143	20·1	42	0·7	4,491	79·2	5,676	2,860
1968	973	16·0	155	2·5	4,942	81·5	6,070	3,519
1969	948	15·8	157	2·6	4,892	81·6	5,997	3,490
1970	837	13·9	131	2·1	5,059	84·0	6,027	3,941
1971	655	10·2	231	3·6	5,533	86·2	6,419	4,631

Health visiting

TABLE XVII

Details of home visits paid to:

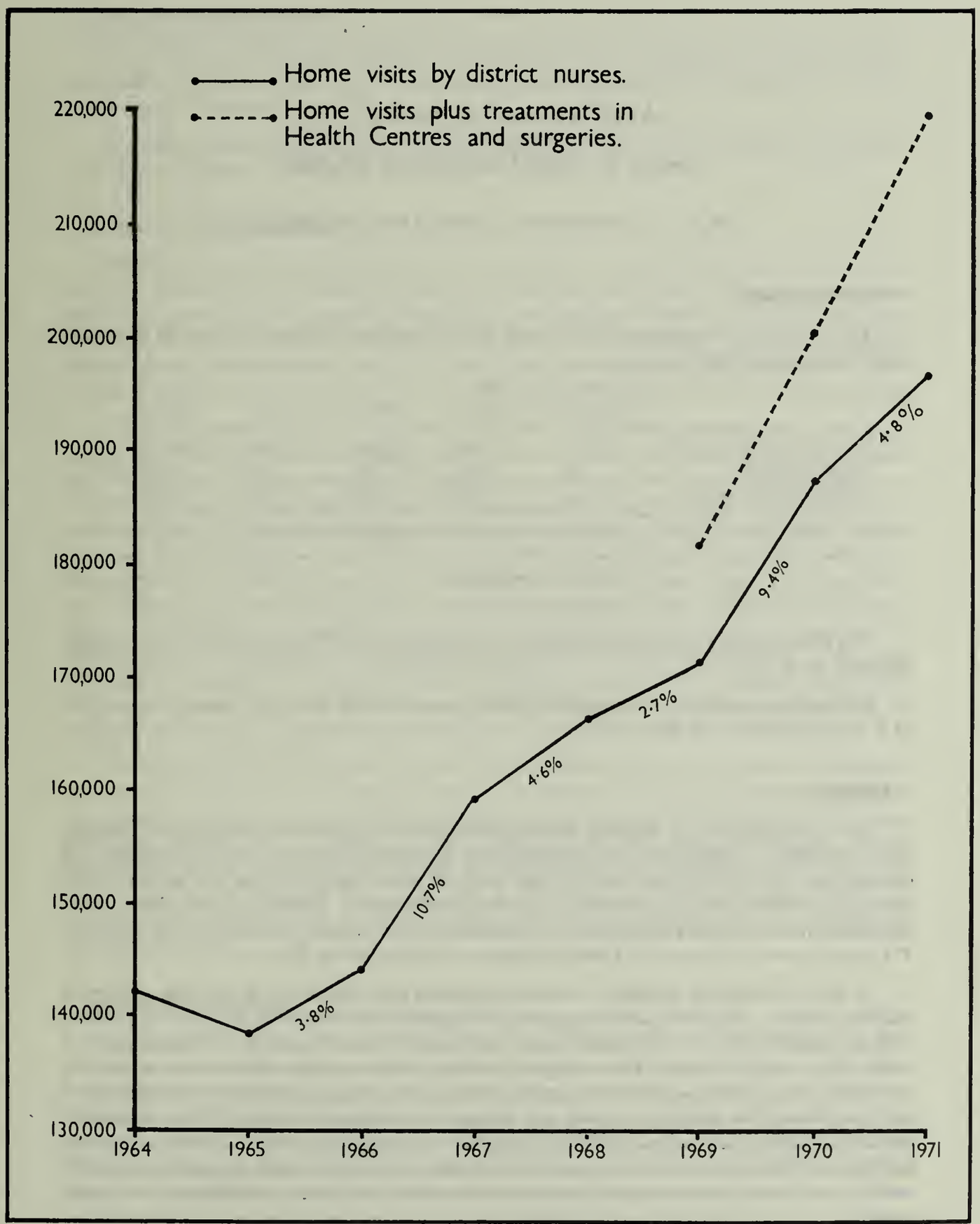
	1971	1970	1969
Children born in current year	30,970	27,438	28,289
Children born in previous four years	39,024	34,705	37,045
Tuberculosis	103	87	121
Mentally disordered	595	606	663
Persons aged 65 years and over	5,675	4,219	3,549
Persons discharged from general hospital ...	186	84	70
Other	8,393	9,765	10,570
Total	84,946	76,904	80,307

TABLE XVIII

Attendances by health visitors at:

	1971	1970	1969
Child health clinics	2,441	1,838	1,995
Mobile health clinics	434	445	405
Chest clinics	233	266	355
Immunisation clinics	112	114	94
Vision clinics	23	41	63
Family planning clinics	346	243	136
Enuresis clinics	17	7	24
Venereal disease clinics	220	89	82
Diabetic clinics	48	61	58
General practitioner clinics	7,327	6,156	3,605
Cytology clinics	13	44	27
Hearing screening sessions	612	588	282
Total	11,826	9,892	7,126
Increase over previous year:	19%	39%	83%

Note: These attendances exclude duties in the School Health Service.


Home visits by district nurses.
Home visits plus treatments in Health Centres and surgeries.
220,000
210,000
200,000
190,000
180,000
170,000
160,000
150,000
140,000
130,000
1964
1965
1966
1967
1968
1969
1970
1971
3·8%
10·7%
4·6%
2·7%
9·4%
4·8%

AMBULANCE SERVICE

(Section 27, National Health Service Act, 1946)

MR. P. H. J. WILKINSON, COUNTY AMBULANCE OFFICER

1. Work undertaken

The following table summarises the work of the year and the graph on page 59 shows the trend for the past twenty years.

	Accidents or emergencies	*Out-patients*	*Others*	*Total*	*Mileage*
County Council service ...	11,731	152,484	16,262	180,477	1,064,340
Agency services ...	15	237	253	505	18,764
Hospital car service ...	—	406	103	509	18,236
Totals	11,746	153,127	16,618	181,491	1,101,340
Patients conveyed by train				448	31,106

The total number of patients increased by 10,660 over the 1970 figure and the total mileage increased by 42,071.

Out-patients accounted for a slightly higher percentage of the total patients carried i.e. 84.3, as against 84.2% in 1970.

2. Statistics

Set out on page 59 is a diagram showing the numbers of patients carried for each calendar year since 1952. Although a small percentage of the annual increase is due to accidents and emergencies, by far the largest users are day patients attending psychiatric and geriatric units and this service is likely to increase as hospital development schemes are completed. One significant feature which emerges from the diagram is that twenty years ago, i.e. in 1952 only 194 patients were conveyed per 1,000 population as against 529 in 1971.

It will be noted that emergency demands represent only some 6·5% of the total number of patients carried. Accidents and emergencies are classified as those cases which must be dealt with immediately but do not include urgent admissions where the patient's doctor agrees a delay of an hour or more. The emergency service places a considerable strain on existing resources since most journeys are for individual patients travelling in a double manned ambulance and cover should be adequate to meet any demand without undue delay. Owing to extreme pressure of work, in a rural county such as this, the emergency cover for a particular area is not infrequently fully committed to non-urgent work due to out-patient and day-patient demands and the only emergency ambulance immediately available may be at a station some 8-10 miles away.

3. Establishment and locations

The map on page 60 shows the locations of the ambulance stations, together with the number of vehicles and staff at each one. The total establishment of operational staff is 93 with 47 vehicles plus 4 reserves.

The control centre is located in the County Health Department at County Hall, Northampton with an establishment of ten staff.

4. Control and communications

All calls both urgent and non-urgent are received in the central ambulance control, which is equipped with a modern telephone system, radio telephony and Telex. Because of the complexity of a service dealing with emergency and non-emergency calls at the same time, some considerable time was spent on planning and designing the lay-out of the control room, a sketch plan of which is shown below. Section A deals with all work for the day in question, whilst Section B deals with future requests, queries, planning and co-ordination for the following day.

Telex was introduced during the latter part of the year and installed in the central ambulance control and in the five busiest ambulance stations, viz.: Corby, Daventry, Kettering, Rushden and Wellingborough. At present this system of communication with the stations is used in the main for non-urgent work only and for the transmission of journey loads for each individual vehicle. Although it has increased the work of the control staff, it has provided a more efficient arrangement for station personnel, to whom previously all work was dictated over the telephone. The machine at each station provides a typed copy for the individual vehicle's journey record and a carbon copy for station records. The main advantage is that all the information as it becomes available can be punched on tape within the control room and later transmitted at high speed to the stations concerned, whether the station is manned or unmanned at the time. In addition it provides a country-wide communications link with other ambulance authorities similarly equipped—in particular the London ambulance service, to whose area patients are regularly sent by rail for specialist investigations not available locally.

The decision of the Ministry of Posts and Telecommunications to transfer all ambulance services radio schemes to a new high band block of frequencies on F.M. was unexpected. However since we were committed to replace our old equipment during 1972 to meet the new 12½ Kcs. waveband specification, expenditure on new equipment had been previously planned. Nevertheless the transfer from low band to high band frequencies led to a complete survey in the autumn of 1971 of the whole area using five of the major manufacturers' equipment. The survey is now complete and it is hoped that new equipment will be installed and operating by 1st January 1973.

5. Vehicles and equipment

The problem of arriving at a suitable establishment of vehicles in a rural county is extremely difficult, since demands vary considerably from day to day. In a single-tier service, ambulances have to be used for non-urgent as well as accident/emergency work and at present the fleet is divided into 20 conventional ambulances (i.e. two stretcher carrying capacity) and 31 sitting case vehicles, which, although designed primarily for the conveyance of persons able to sit, can take one, or two stretcher patients depending on design. The price range of these vehicles varies from £3,500 for a fully equipped ambulance to £1,800 for a simple 12-seater minibus suitably adapted for ambulance use. Thus any replacement programme has to be based on

expenditure as well as operational requirements. The modern ambulance is now equipped with two trolleys, one on either side, and often due to demands has to be used for the conveyance of sitting cases, accommodated 4 to each trolley. One might argue that this is an expensive vehicle for use in conveying sitting cases only, but it does provide flexibility in that at any time it can serve the dual role of an accident/emergency vehicle or a simple minibus.

In recent years, due to day-patient and out-patient demands, the emphasis in the purchase of vehicles has been on sitting case vehicles but due to the continuing rise in accidents and emergencies and earlier discharges from hospital it is apparent that the number of conventional ambulances will also have to be increased substantially in the next few years.

The Department of Health and Social Security issued advice on resuscitation, aspiration and oxygen equipment and, at the end of the year, a circular recommending the use of Entonox. As there was no provision in the estimates for the purchase of such new equipment, full implementation has been deferred until 1972/73. Nevertheless we were able to equip the two 24-hour stations at Northampton and Kettering with Entonox and preliminary assessment of its value is encouraging.

6. Recruitment and training

There has been no problem in the recruitment of staff to the service. Advertisements in the local press for new staff result in up to 30 applications each time. Due to the higher standard of training and the need for new recuits to undergo a six-weeks training course at the Leicestershire Training Centre, the standard required of new members of the service continues to rise. Due to high housing costs in South-East England, applications are now received from young fully trained ambulancemen from services in that area and this year four men joined us from Hertfordshire and one from the London service.

Thirty-five ambulancemen attended training courses at the Leicestershire Training School, 31 on the two-week Ambulance Aid course and four on the six-week recruit course, all of whom passed their examinations, although one experienced ambulanceman failed on his first attempt but easily passed the second time. There is no doubt that the training received has provided a more efficient service to the public, particularly on the accident and emergency side. The staff are only too anxious to increase their knowledge and skills, and this will eventually increase their status in the para-medical world.

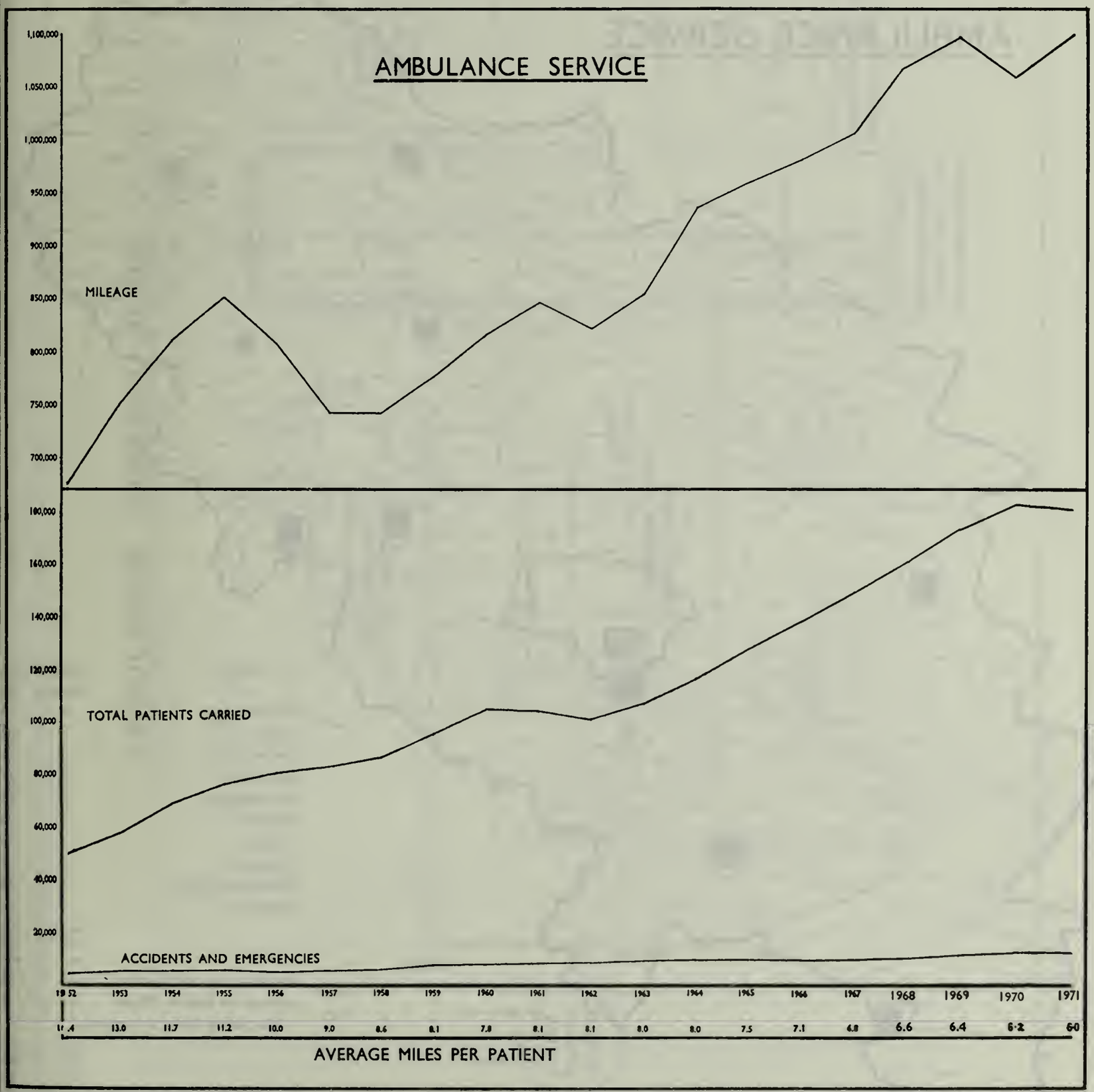
In-service training was introduced during the latter half of the year with visits to Manfield Orthopaedic Hospital, Northampton and the Renal Unit, Churchill Hospital, Oxford. The latter programme was introduced due to the increasing number of County residents with home dialysis machines. Dr. D. O. Oliver, Consultant Physician at the Churchill Hospital kindly agreed that parties of not more than 12 staff could attend the Renal Unit on Saturday mornings to gain an insight into the situations likely to be encountered with patients. This training was so well received by those members who attended, that further visits have been arranged so that ultimately all staff will have the opportunity to attend.

7. Competitions

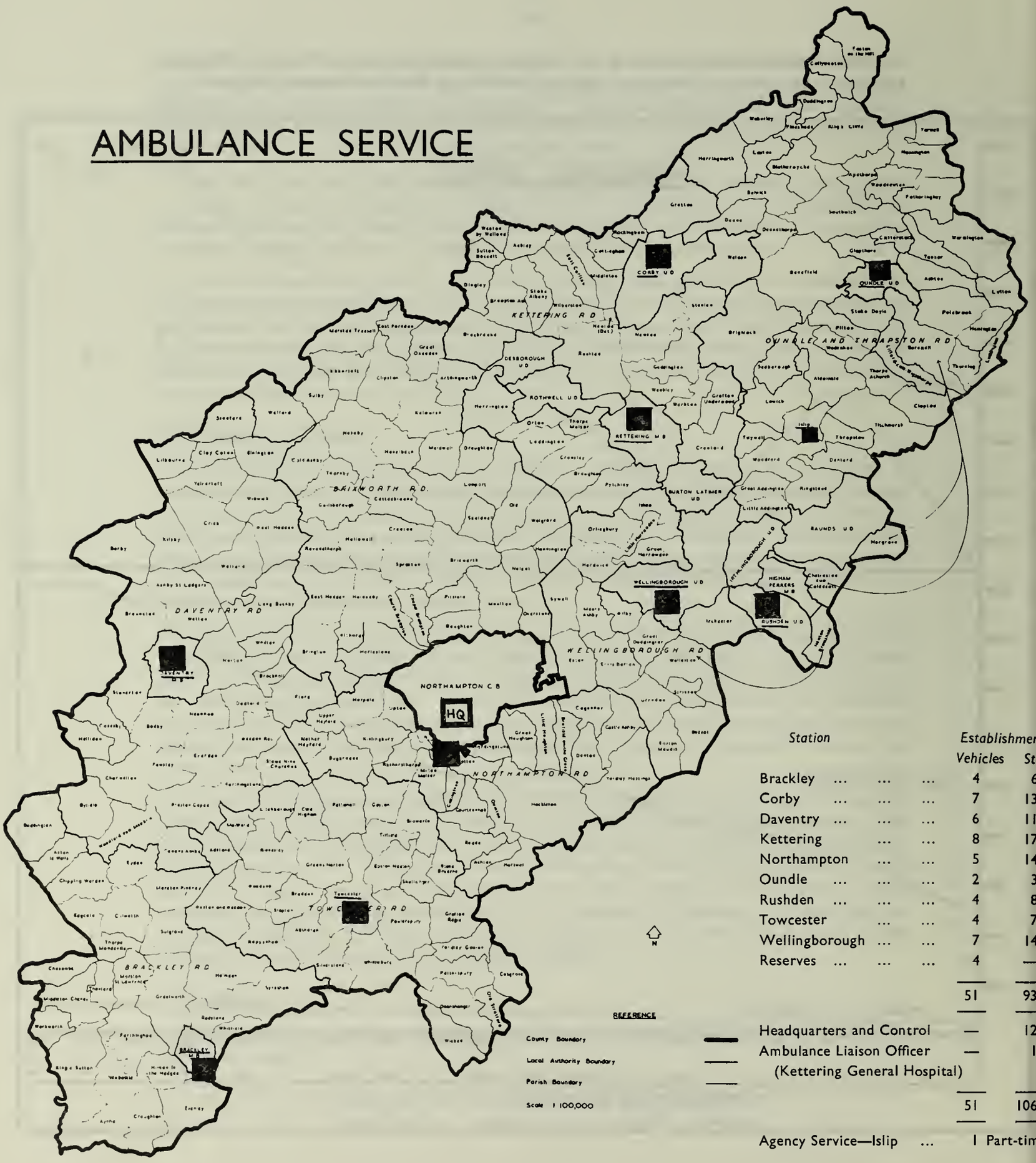
The annual inter-station competition was held at Towcester Sponne School on 22nd May and winners were:

Team Test:	Mere Way Station
Attendant's Test:	Ambulanceman J. Mitchell, Kettering
Driving Test:	Ambulanceman G. Geddes, Rushden

These winners later took part in the Regional Competition held at Oxford on 20th June but were not successful in obtaining a place in the National Finals held later in the year.



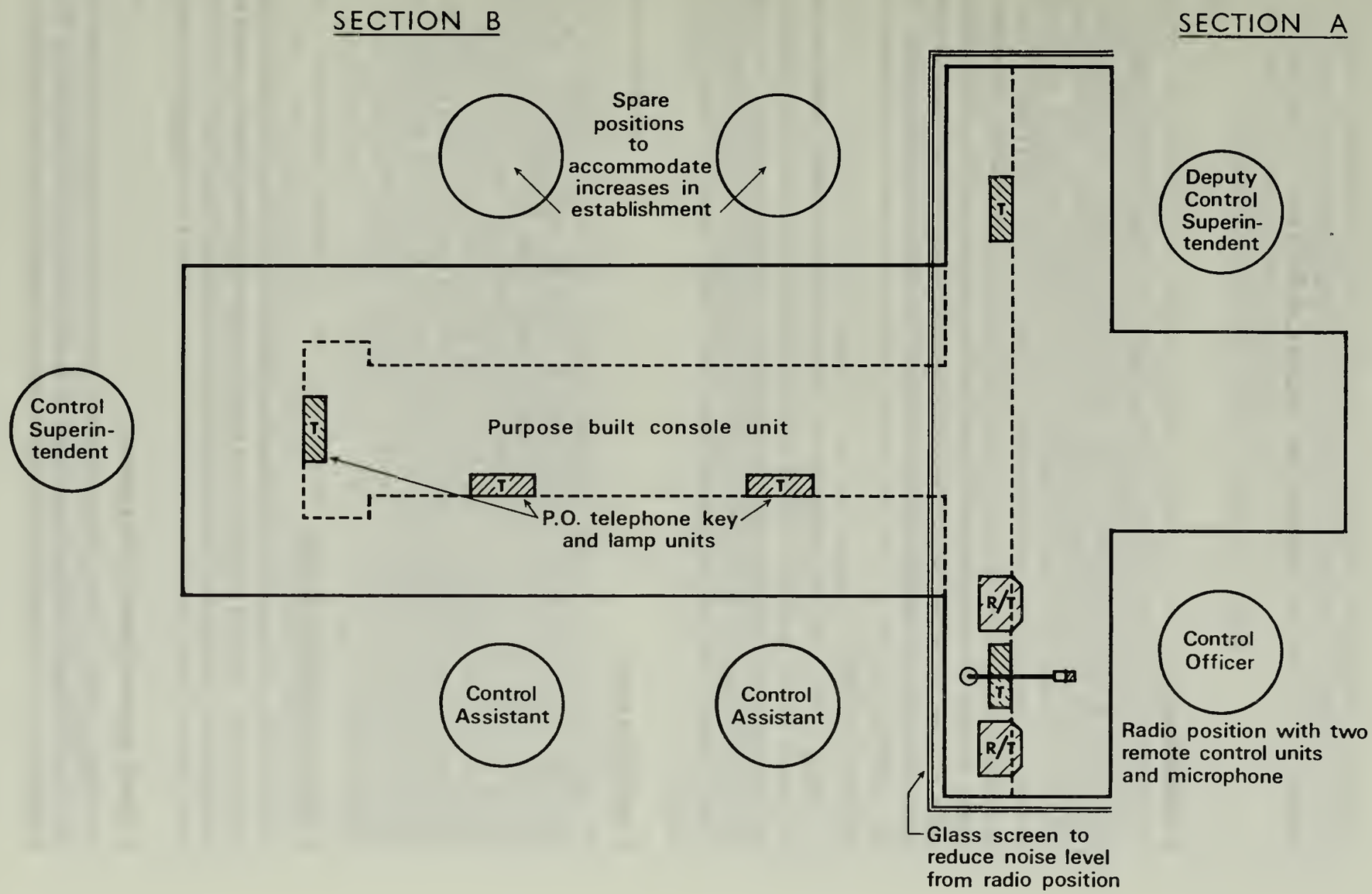
AMBULANCE SERVICE



Station	Establishment Vehicles	Sta
Brackley	4	6
Corby	7	13
Daventry	6	11
Kettering	8	17
Northampton	5	14
Oundle	2	3
Rushden	4	8
Towcester	4	7
Wellingborough	7	14
Reserves	4	—
	51	93
Headquarters and Control	—	12
Ambulance Liaison Officer (Kettering General Hospital)	—	1
	51	106

Agency Service—Islip ... 1 Part-time

AMBULANCE CONTROL ROOM



HEALTH EDUCATION

Miss J. Wingfield, Health Education Organiser

1. Introduction

One very effective way of passing on information is by talking. Whilst talking is not the only method of health education it is one which is more effective than many people realise. Listening to a short talk and then joining in a discussion has become a well established pattern of many organisations including the mothers' clubs. Excellent examples of such activities are the talks on dental care and preventive measures referred to by the Chief Dental Officer. There are now thirty-one such clubs in the County all of whom have the backing of a health visitor. During the year five new clubs were formed and older members of two well established ones separated from their respective groups to form senior clubs at which they can study topics of a more involved and sociological nature than those required by younger mothers. This is a most gratifying step and it is but one example of an increasing desire for knowledge by people with enquiring minds.

However, there are many people who do not have enquiring minds. There are many who are ignorant of the possibility of health hazards and there are those whose problems are such that education of a face to face nature is the only way of helping the family. With the aim of offering information to a much larger section of the general public, the health education caravan is being re-fitted so that displays and exhibitions can be held in frequented places such as market squares.

2. Training of staff

Many branches of the health department come into contact with members of the general public and consequently have the opportunity of promoting health education, either to individuals or to groups. The Health Education Organiser has welcomed the opportunity to lecture to district nurses, school nurses and nursing aides in their training courses and to make them aware of the facilities and aids which exist in the health education section. Student district nurses, student health visitors and pupil midwives have also visited the section. Four student dietitians and an administrative trainee have also been shown the light of preventive medicine and health education. Training in 16mm projection has also been given to new members of staff.

3. Teaching of expectant mothers

The pattern of ante-natal parentcraft and relaxation teaching has remained similar to previous years. Sessions continued in all health centres and clinics and in five village halls, but two classes were commenced in general practitioners premises, in Long Buckby and in Kettering, health visitors, district nurses and expectant mothers all being from the respective practices.

4. Health education amongst young people

Whilst only two youth clubs have asked for talks on health education topics, both Kettering and Corby Technical Colleges have asked for health education for students on day-release training courses. At Corby, two courses of lectures including human development, venereal

disease and family planning were given entirely by health visitors but now are being taken jointly by teaching and health department staff using aids provided by the health education section. At Kettering, lectures have been given on childbirth, drug dependence, family planning and venereal disease, as part of a liberal studies course.

5. Smoking

Students from Wellingborough Technical College requested help in reducing the smoking habit. Following discussions between medical officers, students and staff representatives, questionnaires were put to one hundred students. Of the eighty-two returned eighteen were smokers. Syndicate discussions were held and from these seven students volunteered to form an action group. Follow up of the group has not been possible because its members have dispersed on completion of their respective courses.

As part of the general programme against smoking, an experimental anti-smoking group was formed in Corby. Fifteen people attended initially following personal invitations. Films were shown and discussions led by a trainee general practitioner and two health visitors. However, attendance gradually diminished and the only people who stopped smoking were the two health visitors.

In an attempt to dissuade primary school teachers from smoking, and in order to obtain their opinions before similar teaching was given to their pupils, invitations were given to a tea-time demonstration/discussion. The response was minimal.

Posters on the hazards of smoking were distributed to clinics and health centres; also, on request, to youth clubs and to a few general practitioners, in a further attempt to put the facts before the public.

6. Prevention of obesity

The slimming business has become increasingly popular both as a money making concern and as a cause of concern regarding the health hazards of obesity. As an alternative to prescribing amphetamines as a slimming aid, doctors at Queensway Health Centre requested the formation of a weight reducing class. After discussion amongst medical, nursing and administrative staff it was decided to run a trial scheme. The " Weigh-in Club " was started, to run on similar lines to mothers' clubs i.e. with a committee of members, and speakers on a variety of health topics. Meetings were held weekly at the health centre until increasing numbers necessitated a move to a local school. This move, together with the absence during her confinement of the dietitian, Mrs. Russell, who attends in a voluntary capacity, and the summer holiday period led to a falling off of attendance. A return to the health centre after Christmas produced increasing enthusiasm. Members are weighed at each attendance and given individual advice on diet. A fine is paid for weight gain and progress is discussed. One meeting each month is devoted specifically to nutrition and one to slimming exercises. Films, discussions and talks on a variety of topics are also included in the programme.

7. Prevention of accidents

Home safety

The electrical safety project, including a display in the health education caravan, continued to be directed mainly at schools. The display also formed part of a more comprehensive exhibition on accident prevention and treatment, staged at the " Living and leisure " exhibition of

the Corby Highland Gathering. This popular two day event in the north of the county provides an excellent venue for promoting health education to the general public and it is hoped to exhibit at this and similar events each year.

Liaison with the Corby Home Safety Officer has enabled a joint exhibit on fire hazards to be sited in the Council Offices and the Development Corporation Offices; and one on "Accidental poisoning" at the works entrance of a local factory.

Visual aids staff combined with ambulance staff to present an exhibition on prevention and treatment for home accidents at the county ambulance competition.

Water safety

In order to complement the Royal Society for the Prevention of Accidents' campaign "Water can be dangerous" the health education section organised its own comprehensive programme on water safety. This was directed towards parents and children and was concerned with hazards in the home and garden, the dangers of inland waterways and safety by the sea. Pictorial display boards on these topics were circulated to clinics and health centres throughout the year.

Posters and booklets were supplied to voluntary organisations and public libraries. Heads of all primary and special schools were circulated with posters and teaching notes, the relevant leaflets for the pupils being supplied on demand.

Co-operation with other organisations was sought and an article about water safety and local publicity measures was published in the Northamptonshire Parish Councils Association quarterly magazine. A display was placed in the British Waterways Museum at Stoke Bruerne during June. Visitors during the month totalled 11,000 including parties of schoolchildren.

Safety by the sea was also included in the "Living and leisure" exhibition mentioned earlier. Visitors were able to examine a modern ambulance and training in mouth to mouth resuscitation was given by county ambulance staff.

Water safety particularly related to inland waterways was the subject of health education displays at British Timken Show and Kettering Trade Fair. Films were shown and demonstrations given of resuscitation. At these events, health department staff were assisted by the Royal Life Saving Society, St. John Ambulance Brigade and Sea Scouts.

Smaller displays were mounted at Desborough and Rothwell Carnivals and although these events do not attract the thousands of people who attend the major shows of the county, the staff involved were kept equally busy in answering questions and giving demonstrations.

As a result of the obvious interest shown in such health education functions, it is planned to attend these activities and similar gatherings in other towns and villages in the county, using the health education caravan.

8. Promotion of mental health

Together with many other organisations the Health Department supported the National Association for Mental Health's "Mind Week". Posters, display boards and literature were circulated to all health centres and clinics and to mothers' clubs. The object of the health education section's publicity was to promote an awareness of the need for understanding mental health and the mentally sick, and also the need for voluntary helpers. As a result of the mental


LEARN WATER SENSE
PRESENTED BY
NORTHAMPTONSHIRE
HEALTH DEPARTMENT
IN ANY SEASON
ICE MELTS QUICKLY AND BREAKS
NEXT
FILM SHOW
AT
HERE'S HARDEW

MOUTH-TO-MOUTH RESUSCITATION

health week campaign in this county *one* volunteer offered her services to Mrs. Harper (organiser, volunteer services c/o Council of Social Service).

There is an increasing need for an awareness of social responsibility amongst the public, and visiting lonely persons or being aware of the dangers of hypothermia are examples of opportunities for individual action.

There are also opportunities for groups to help in preventive medicine in a voluntary capacity. The help received from voluntary organisations during health education exhibitions has been most valuable and it is hoped that this is a forerunner of much closer liaison with such groups and with industry.

INFECTIOUS DISEASES

1. Notifications

The total notifications for 1971 showed an increase of 6% over 1970 and are shown in detail in the table on page 66.

The most remarkable increase was in whooping cough which leapt 63% from 87 to 142. Infectious hepatitis showed the most marked decrease, falling by 62% from 108 to 41 followed by respiratory tuberculosis which fell 20% from 42 to 31.

2. Vaccination and immunisation

(a) Control of immunisation and vaccination by computer

During the year four new general practitioners entering practices already participating in the scheme, indicated that they wished to continue the arrangements.

(b) Triple immunisation and poliomyelitis vaccination

5,635 children received a primary course of triple immunisation in 1971, compared with 5,573 in 1970 and 5,847 children received a primary course of poliomyelitis vaccination compared with 5,866 in 1970.

Children totalling 1,789 were given a booster dose of triple antigen, and 3,715 received a booster dose of diptheria/tetanus antigen (the pre-school booster) while 5,067 children had a booster dose of poliomyelitis vaccine.

The histograms on pages 68-69 show the number of inoculations against each of the diseases completed during 1971, and the total of children, born since 1st January 1955, who by 31st December 1970 had completed a course of immunisation against diphtheria and poliomyelitis.

The children born in 1971 have been ignored for statistical purposes as the primary course under the revised schedule is not completed until the child is twelve months of age.

(c) Vaccination against smallpox

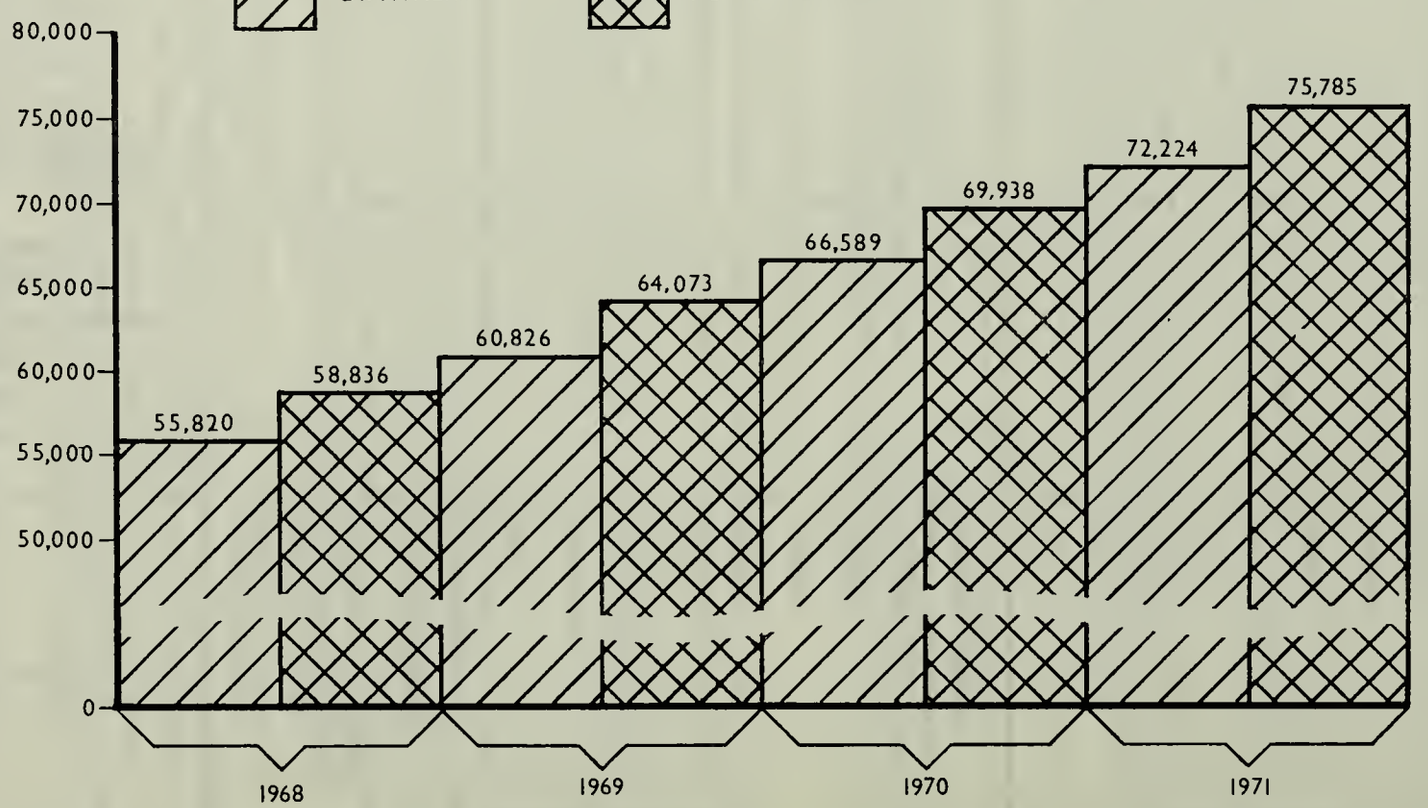
In July, 1971 the Chief Medical Officer to the Department of Health and Social Security informed local authorities that an examination of the World Health Organisation's Smallpox Eradication Programme over the past 5 years had been carried out by the Smallpox Vaccination Sub-Committee. In view of the evidence obtained the Chief Medical Officer recommended that smallpox vaccination should no longer be included in the routine immunisation programme for young children.

In accordance with this recommendation it was decided that appointments for vaccination against smallpox would be deleted from the computer programme. However, persons travelling to infected areas and health services staff coming into contact with patients should still receive protection.

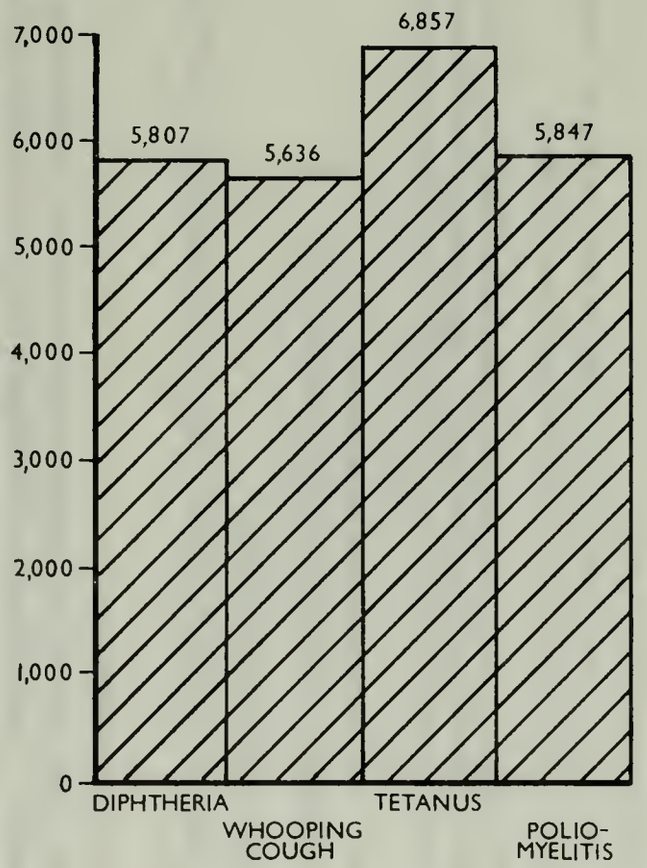
CASES OF INFECTIOUS DISEASES

DISEASES	URBAN DISTRICTS														RURAL DISTRICTS										Totals for Administrative County
	Brackley (Borough)	Daventry (Borough)	Higham Ferrers (Boro')	Kettering (Borough)	Burton Latimer	Corby	Desborough	Irthlingborough	Oundle	Raunds	Rothwell	Rushden	Wellingborough	Totals for Combined Urban Districts	Brackley	Brixworth	Daventry	Kettering	Northampton	Oundle and Thrapston	Towcester	Wellingborough	Totals for Combined Rural Districts	
Anthrax	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Dysentery	4	25	1	...	...	38	...	2	...	...	...	1	5	76	...	...	3	...	...	1	...	1	5	81	
Encephalitis, acute, infective ...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	
Encephalitis, acute, post-infectious ...	...	...	...	...	...	2	...	...	...	...	...	...	1	3	...	...	...	...	...	...	...	...	...	3	
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Food poisoning ...	...	1	...	6	...	6	2	...	...	1	...	4	6	26	2	1	7	1	3	...	1	1	16	42	
Hepatitis, infective ...	1	4	...	4	...	11	1	...	...	...	...	2	1	24	1	2	2	2	6	...	3	1	17	41	
Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Measles	75	70	2	148	6	644	40	71	6	...	9	167	155	1393	83	119	84	90	132	50	53	55	666	2059	
Meningococcal infection	...	...	...	6	...	2	...	...	...	1	...	...	2	11	...	...	...	2	...	1	2	...	5	16	
Ophthalmia neonatorum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Paratyphoid fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Pneumonia, acute ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Poliomyelitis, acute, paralytic ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Poliomyelitis, acute, non-paralytic ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Puerperal pyrexia ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Scarlet fever	...	...	...	18	1	1	3	2	1	...	4	...	...	30	1	2	3	3	4	...	2	...	15	45	
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Tuberculosis, respiratory	...	...	...	1	...	4	...	1	...	...	...	3	9	18	1	...	1	2	1	2	3	3	13	31	
Tuberculosis, meningeal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Tuberculosis, other ...	...	...	1	3	...	3	...	...	...	...	...	1	4	12	...	1	...	4	1	...	2	2	10	22	
Typhoid fever	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	
Whooping cough ...	...	54	...	16	...	6	...	3	...	...	2	...	13	94	...	2	15	2	12	...	14	3	48	142	
Totals	80	154	4	203	7	717	47	79	7	2	15	178	196	1689	88	127	115	106	159	54	80	66	795	2484	

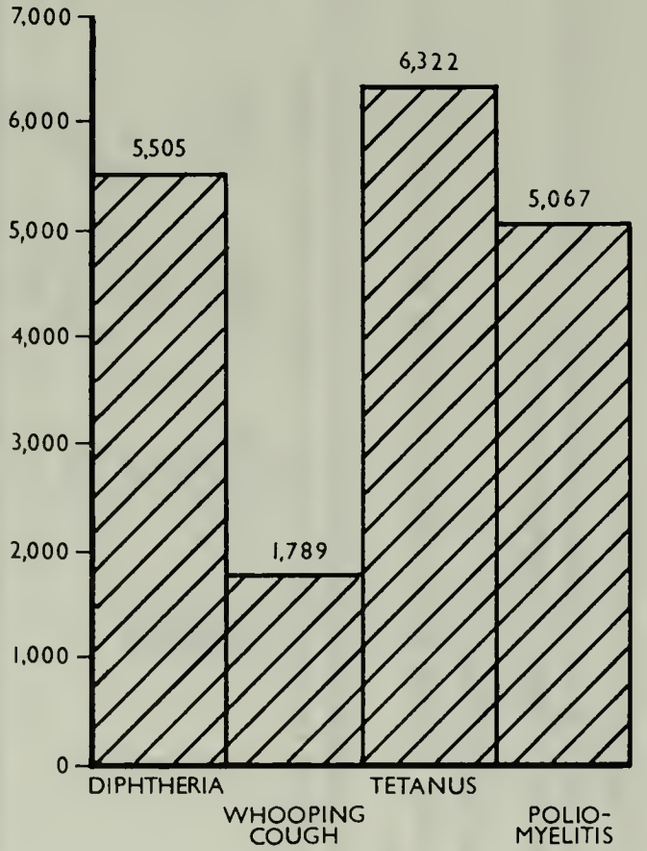
COMPARISON OF CHILDREN UNDER 16 YEARS OLD WHO HAD COMPLETED IMMUNISATION COURSES



TOTAL OF CHILDREN GIVEN PRIMARY INOCULATIONS DURING 1971



TOTAL OF CHILDREN GIVEN BOOSTER INOCULATIONS DURING 1971



(d) Anthrax vaccination

Anthrax vaccination by general practitioners continues to decline. This year, only 34 doses of vaccine were issued compared with 67 in 1970.

(e) Yellow fever vaccination

The yellow fever vaccination clinic continues to be held on Thursday morning of each week, and this year a total of 572 people attended.

(f) Measles vaccination

During the year 6,041 children between the ages of 1 and 7 years were vaccinated against measles.

The following table shows that at the end of 1971, 67% of children born between 1st January 1968 and 31st December 1970, had been vaccinated against measles.

Year of birth	*Vaccinated in* 1971	*Vaccinated in* 1970	*Vaccinated in* 1969	*Total*
1970	3,480	4	—	3,484
1969	1,134	3,411	2	4,547
1968	681	3,015	337	4,033
	5,295	6,430	339	12,064

Of children born in 1969 76.1% had been vaccinated against measles by December 1971, and 10.6% were not vaccinated, either because they had already had the disease or the parents refused consent.

3. Tuberculosis

(a) Incidence and mortality

There were 53 new notifications of which 31 were respiratory tuberculosis and 22 non-respiratory. Seven cases were transferred from other authorities.

The Registrar General reported 15 deaths from tuberculosis (14 respiratory and 1 non-respiratory), this being 8 more than in 1970. The mortality rate for the combined urban districts was 4.0 per 100,000 population and 4.9 per 100,000 population for the combined rural districts.

(b) B.C.G. vaccination of schoolchildren

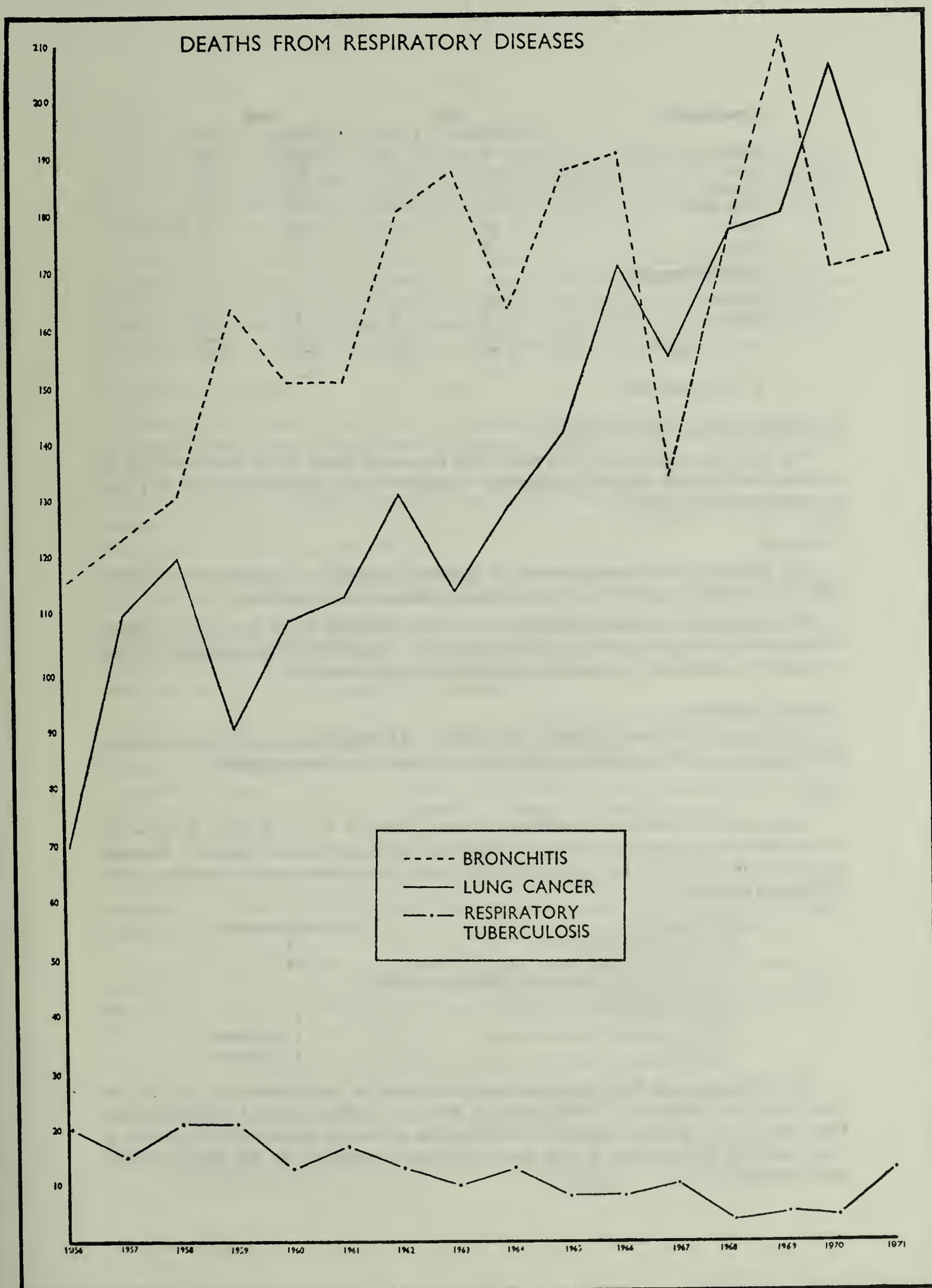
This subject is dealt with on page 90 of this report.

(c) Extra nourishment grants

Grants of free milk were again made to seven patients on recommendation of the chest physician.

(d) Long stay immigrants

Since January 1965, local health authorities have been informed of all immigrants entering this country. Over the last year a considerable drop has occurred in the number of notifications received and it is becoming increasingly difficult to trace many of the addresses given by the people concerned. The table below shows the numbers of immigrants notified to this authority compared with the numbers for 1970.


DEATHS FROM RESPIRATORY DISEASES
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
BRONCHITIS
LUNG CANCER
RESPIRATORY TUBERCULOSIS

Commonwealth	1971		1970	
	Notifications	*Visits*	*Notifications*	*Visits*
Caribbean	8	5	22	22
India	17	11	20	16
Pakistan	7	5	5	4
Other Asian	4	4	13	11
African	23	15	12	9
Other	3	4	8	7
Non-Commonwealth				
European	14	14	33	29
Other	6	5	8	7
Total	82	63	121	105
% of successful visits ...	76·8		86.8	

(e) Reports of the chest physicians

The following extracts have been taken from the annual report on the chest service of the Kettering and District Hospital Management Committee area, prepared by Dr. O. E. Fisher, Consultant Chest Physician.

Area served

The Rushden Chest Service consists of Rushden Hospital and associated Chest Clinics under the administration of the Kettering Hospital Management Committee.

The Headquarters of the Department is at Rushden Hospital, and it serves the population of the north eastern half of the County of Northampton. About 80% of the population is urban, the main industries being boot and shoe, leather and steel production.

Estimated population

The estimated mid-year population was 230,565. The largest towns are Kettering, Corby, Wellingborough, and the population of the latter two towns is increasing rapidly.

Staff

There are two whole-time Consultants who are in charge of beds at Rushden Hospital and hold six-and-a-half out-patient sessions and four mass radiography sessions weekly. There are no junior medical staff but two general practitioners do three clinical assistant sessions weekly at Rushden Hospital.

Clinic premises	*No. of sessions weekly*	
Kettering General Hospital	1½	
Rock Street, Wellingborough ... ... (transferred to Wellingborough Hospital on 1/10/71)	1½	
Nuffield Diagnostic Centre, Corby	2	
Rushden Hospital	1	
Rushden Hospital—Thoracic surgery	1	per month
B.C.G. clinic	1	per month

The Wellingborough Rock Street premises were closed on 30th September, 1971 and the Chest Clinic was transferred to Wellingborough Hospital, Doddington Road, Wellingborough. These premises are proving reasonably satisfactory as an interim measure until such time as x-ray facilities are provided in the new out-patient department at the Park Hospital, Wellingborough.

Hospital beds

There are 48 chest beds at Rushden Hospital. There were 419 admissions in 1971, compared with 388 in 1970. Tuberculosis accounted for 34 admissions or 8% of the total, a big contrast with 17 years ago when over 80% of all admissions were for tuberculosis. Again male admissions preponderated—319 males and 100 females.

On 1st December as a pilot experiment in community care, four beds were handed over to local general practitioners for their own use. There are eleven general practitioners in the Rushden area and they are grouped into three practices and operate from a common Medical Centre. It is too early to evaluate what demand there will be from general practitioners for these beds, but in the first month only two patients were admitted under the scheme.

Tuberculosis

Tuberculosis notifications were 39 in 1971 compared with 47 in 1970. Twenty-four of the notifications were respiratory cases, of which two were contacts.

To set against the 39 new cases added to the clinic register in 1971, 55 names were removed as recovered and the considerable decline in prevalence of tuberculosis in the community is illustrated by the reduction in notified cases on the clinic register from 905 in 1958 to 187 last year, a decline of 79% in thirteen years.

The one unsatisfactory feature of tuberculosis control continues to be the high incidence of infection in the Indian immigrant population, most of whom live in Wellingborough. There are about 800 Indians living in Wellingborough yet this small community accounted for 13 new cases or 1/3rd of the notifications in a population of 230,000. Most, if not all these cases, contracted the infection in this country and the chief causes of this high prevelance are bad environmental conditions in a highly susceptible population.

During the year the names of 10 patients were removed from the clinic register on account of death. Four of the deaths were unconnected with tuberculosis. Of the six deaths where tuberculosis was a significant cause, five were in-patients over the age of 70, all of whom had other serious diseases. The sixth case was a man who did not seek medical advice till the disease was far advanced, and he was admitted to Hospital in a moribund state.

Bronchial carcinoma

Primary lung cancer was again the commonest cause of hospital admission, there being 92 new cases. Of these 77 were males and 15 females, and there has been a steady rise in female admissions during the past three years, whilst male admissions have remained stationary.

There were 84 re-admissions for either terminal care, post operative convalescence, or cytotoxic chemotherapy. The prognosis continues to be gloomy and the number of resectable cases are few. A five year follow up of all cases diagnosed by the department in the two years 1965/66 was done with the following findings:

156 new cases of bronchial carcinoma diagnosed. 140 males and 16 females.

	Resection cases	*Inoperable cases*
Number of cases	17	139
Lost sight of	1	Nil
Number dead under 1 year	2	126 (90%)
Number surviving more than 3 years ...	12 (70%)	2 (1·5%)
Number surviving more than 5 years ...	7 (41%)	Nil

The successful surgical cases had a reasonably favourable prognosis for malignant disease, but they were a highly selective group and only 11% of patients had resectable tumours. The treatment of the 89% of patients with inoperable tumours was so unsatisfactory that in spite of many of the cases receiving radiotherapy of chemotherapy 90% were dead within a year of diagnosis, and only two patients lived for three years. Radiotherapy and chemotherapy therefore can have little effect on length of survival, and these treatments should only be given with a view to relief of symptoms.

Recently we have been using cytotoxic drugs more frequently, particularly in cases where the extent of the disease is too great to be brought within an effective field of radiation or where metastases are suspected. We give a short intensive course of Cyclophosphamide, 1G intravenously daily for five days. This causes a dramatic fall in the white cell count and total, usually temporary, alopecia. We have had some spectacular temporary remissions with this treatment, but it has almost invariably been with oat cell and anaplastic growths. Remissions with squamous cell growths have been more modest save in the relief of pain. Cyclophosphamide appears to be quite specific in relieving pain and will do so when there is no other apparent effect on the tumour.

Mobile chest x-ray service

Conventional mass radiography surveys ceased in 1964, and the service is now chiefly concerned with general practitioner referrals, but also carries out special group surveys such as factory contacts and positive tuberculin reactors in children. The general practitioner service continues to play a vital role in the work of the chest clinics as the figures below illustrate. It also provides an excellent example of the fruitful co-operation between the general practitioner and the Hospital services.

Mass Radiography Service

Survey	*Number X-rayed*	*Referred chest clinic*	*Active Pulmonary tuberculosis*	*Pulmonary tuberculosis rate per 1,000*	*Bronchial carcinoma*	*Out-standing*
Group surveys ...	7,644	19	1	.13	1	3
General Practitioner referrals ...	7,248	175	9	1.24	39	27

Chest clinic statistics

1. *New cases seen*

Tuberculosis—Respiratory—sputum positive	15		
sputum negative	9		
	—	24	
—Non-respiratory		15	
		—	
—Notified		39	
		—	

2. Notified cases of tuberculosis on clinic register at the end of the year 187

3. *Contacts*

Number first seen during year	126
Number subsequently notified	2
Number of B.C.G. Vaccinations	218

4. *Clinic attendances*

New cases—Consultants	984
New cases—Contacts	126
Re-attendances	1,781
X-rayed at clinic	198

5. *Non-tuberculous diseases in new cases attending chest clinics*

Bronchial carcinoma	110
Other primary malignant neoplasms	5
Secondary carcinoma	6
Simple tumours and cysts	1
Chronic bronchitis and emphysema including cor-pulmonale	182
Acute respiratory infections including pneumonia	86
Asthma	62
Spontaneous pneumothorax	7
Non-tuberculous effusions including empyema	7
Bronchiectasis	12
Sarcoidosis	6
Pneumoconiosis	4
Haemoptysis (unexplained)	11
Congenital heart disease	1
Acquired heart disease	30
Miscellaneous	61
No abnormalities discovered	310

Rushden Hospital (in-patients statistics)

1. In hospital, 1st January	29
2. Admissions	419
3. Discharges (including deaths):	
(a) Tuberculosis, respiratory	18
non-respiratory	16
total	34
(b) Neoplasms	188
(c) Acute infections	32
(d) Chronic bronchitis	63
(e) Cardio-respiratory failure and other heart and circulatory conditions	38
(f) Asthma	22
(g) Bronchiectasis	7
(h) Sarcoidosis	3
(i) Other conditions	30
(j) Children—respiratory conditions including primary pulmonary tuberculosis	1
(k) Thoracic surgery bronchoscopies	83
4. Deaths	
(a) Tuberculosis	4
(b) Non-tuberculous	58
5. In hospital, 31st December	31
6. Beds available to chest department 31st December	48

The following notes are based on the report of Dr. P. C. Robertson, Consultant Physician.

The chest service for the south-western part of the County is based at the Northampton Chest Clinic for out-patients and at Creaton Hospital for in-patients. Patients from the most southerly area may also attend the Meecham Clinic, Wolverton which is run by Dr. W. Bermingham from Aylesbury. Owing to a lack of radiological facilities it has not been possible to run out-patient clinics at Danetre Hospital, Daventry and therefore the patients have attended the Northampton clinic.

On 7th June 1971 the Chest Clinic, after being for twenty-five years at St. Matthew's Parade, moved to 1 Billing Road, Northampton. During this period the clinic had been responsible for a most dramatic change in the local state of tuberculosis. It had seen the almost complete disappearance of this malady which only two decades ago had been such a lethal scourge amongst, particularly, boot and shoe workers. In recent years the clinic has had to deal mainly with other forms of chest disease and it became essential that it should be brought much closer to the General Hospital. The new clinic will continue all the established functions of the chest service, and in particular x-ray sessions open to the general public are still held on Tuesdays 11 a.m.-12 noon, and Wednesdays 9-11 a.m. and 6-7.30 p.m.

The number of newly notified cases of tuberculosis living in this part of the County remains extremely small. Of these just over half of them involved the lungs whilst the remainder affected glands. These patients were widely scattered throughout the area and no source of infection could be traced in spite of careful screening of all possible contacts. In this area no general environmental factors appeared to be responsible for perpetuating the infection. All of the discovered cases were completely unrelated.

Once again no schoolchildren were discovered to have active tuberculosis in this territory. The persistence of a small core of the disease, however, suggests that it would be wise to continue the policy of offering B.C.G. immunisation to all teenagers. Associated skin testing will also indicate any children particularly at risk to developing the infection.

No general factors can be found amongst the proven cases except that the disease chiefly affects the elderly. The glandular infections were confined to the over-sixties and tuberculosis was discovered at post-mortem examination of two elderly persons. Active pulmonary disease is still occasionally found in middle-aged patients of varying social backgrounds. In two instances home circumstances were ideal but in another two they were very poor. The Mobile Chest X-ray Service has been of great value in locating these cases in the widespread rural area.

Attendances at Northampton Chest Clinic:

Total attendances for the area (including Northampton Borough patients)	8,634
Total X-ray examinations (large films)	3,049
Total miniature X-ray films	4,051
(The proportion of Northamptonshire County patients included in the above figures is estimated as approximately one-quarter)	
B.C.G. vaccinations for Northamptonshire only	114

Tuberculosis

New cases in south-western area diagnosed in 1971:

Respiratory: Sputum-positive	5
Sputum-negative	–
Non-respiratory:	4
	9
After-death notifications: Respiratory	2

4. Sexually transmitted diseases—contact tracing

Mr. R. A. Goosey, Health Visiting Officer

As in previous years, clinics have been held at Kettering and Northampton General Hospitals. The clinic at Northampton is held in the out-patient block, the times being unaltered. A member of the health visiting staff employed in contact tracing duties attends the clinic as required.

The clinic at Kettering, due to an increase in the number of clients attending, has been extended on Tuesday evenings from 4 p.m. until 7 p.m. An increase of staff has led to greater efficiency in the organisation of the clinic. There are now two Doctors in attendance each having consulting and treatment rooms available. The hospital out-patient staff provide nursing facilities whilst a health visitor interviews all the clients attending.

The present increase in numbers of clients attending is in common with national trends and can be attributed to various factors, one of which may be the ready availability of the contraceptive " pill ". Many clients who were previously afforded some protection by the use of a sheath, are now becoming exposed to venereal conditions. There has been a significant increase in the number of young " hippy " type persons attending, of both sexes, who seem to have a total disregard for the consequences of repeated exposure to infection. Regretfully some of the persons attending are also users of cannabis and other drugs.

The close proximity to Kettering of a large United States Air Force Base seems to provide a constant source of female patients to the clinic. In contrast to previous years the servicemen have themselves advised the girls to attend a clinic.

Practising homosexuals also contribute to the number of clients attending and they present a particular problem in contact tracing as they are rarely aware of the correct identity and whereabouts of their contact.

Contact tracing

During the past year, the health visitors deployed on contact tracing duties have been in regular attendance at the Kettering Clinic.

When a patient attends, he or she is issued with a number which corresponds with an entry in the confidential register of names and addresses maintained by the clinic. The client is thereafter identified by that number and is examined and treated by the doctor present. Following treatment, each patient is interviewed by the health visitor who will arrange further appointments as required. The interview is all important in that the client is generally anxious and willing to assist in tracing his or her contacts. The most convenient method is by the issuing of " contact slips " which are taken by the patient to the known contact. Often it is necessary to issue several slips to one patient in an attempt to trace and treat all contacts. The response to this method of tracing is very good and most known contacts have eventually attended for treatment.

Occasionally " innocent " parties have become involved and much time is spent and diplomacy involved in trying to avoid disrupting other relationships. Every effort is made to preserve confidentiality and to maintain a trust between patient and staff. There are very few defaulters from the clinic and most of these have been " traced " by the health visitors and persuaded to return to complete their treatment.

The Northampton and Kettering clinics continue to compare information when required and this liaison continues to improve the success of contact tracing.

The number of County patients attending clinics for the first time during the last three years was:

	Syphilis			*Gonorrhoea*			*Other conditions**		
	1969	**1970**	**1971**	**1969**	**1970**	**1971**	**1969**	**1970**	**1971**
Bedford General Hospital	—	—	—	—	1	1	—	7	5
Kettering General Hospital	1	—	4	45	34	38	64	107	166
Northampton General Hospital	5	3	1	27	16	38	137	115	149
Peterborough General Hospital ...	—	2	—	1	2	—	6	1	—
	6	5	5	73	53	77	207	230	320

*These include—

Chancroid
Lymphogranuloma
Granuloma inguinale
Non specific urethritis
Non specific urethritis with arthritis
Trichomoniasis
Candidiasis
Scabies
Pubic lice
Herpes simplex
Warts
Molluscum contagiosum
Other treponemal diseases
Other conditions treated
Other conditions not treated

ENVIRONMENTAL HYGIENE

1. Water supply and sewage disposal

(a) Approval in principle

The following schemes were submitted to the County Council in accordance with the provisions of the Rural Water Supplies and Sewerage Acts, 1944-1951 and were approved in principle:

Authority	*Scheme*	*Estimated cost*
Brackley R.D.C. ...	Main drainage of Hinton-in-the-Hedges	£39,000
Bucks Water Board ...	Extension of mains water supply to Nos. 2-8 Watling Street, Potterspury	£765
	Water main extension to Needles Farm, Litchborough ...	£1,394
Mid-Northamptonshire ...	Water main extension, Sibbertoft to The Coombes	£3,125
Water Board ...	Water main extension to The Gables, Fog Cottages, Althorp ...	£5,000
Oundle and Thrapston ...	Benefield sewerage and sewage disposal	£109,000
R.D.C.	Chelveston-cum-Caldecott sewerage and sewage disposal ...	£112,250
	Collyeston sewerage and sewage disposal	£148,000
Towcester R.D.C. ...	Blakesley Group sewerage and sewage disposal—parishes of Adstone, Blakesley, Maidford and Woodend	£212,500

(b) Contributions made

The County Council agreed to make the following contribution in accordance with the approved scale.

Authority	*Scheme*	*Estimated cost*	*Ministry of Housing and Local Government grant*	*County Council's contribution (capital sum)*
Brixworth R.D.C.	Brington sewerage	£66,010	Half-yearly payment of £1,170 for 30 years	£23,110
Bucks Water Board	Extension of water main Paulerspury	£1,087	£126 (capital sum)	£126
	Water main extension to Needles Farm, Litchborough	£1,394	£126 (capital sum)	£126
Daventry R.D.C.	Whilton sewerage	£41,000	Half-yearly payments of £425 for 30 years	£8,575
Kettering R.D.C.	Warkton and Weekley sewerage	£60,733	Half-yearly payments of £968 for 30 years	£19,535
Wellingborough R.D.C.	Irchester sewerage (Phase II)	£343,000	Half-yearly payments of £1,276 for £30 years	£24,675

(c) Revised contribution

The County Council revised its contributions in the light of revisions made by the Ministry of Housing and Local Government, as follows:

Authority	*Scheme*	*Estimated cost*		*Ministry of Housing and Local Government grant*		*County Council's contribution (capital sum)*	
		Original	*Revised*	*Original*	*Revised*	*Original*	*Revised*
Brackley R.D.C.	Whitfield main drainage	£36,155	£31,561	Half-yearly payments of £233 for 30 years	Half-yearly payments of £179 for 30 years	£5,886	£5,420
Wellingborough R.D.C.	Sewerage of Furnace Farm, Little Harrowden	£4,311	£3,480	£1,031 (capital sum)	£896 (capital sum)	£1,031	£896

2. Rural housing

At the time of printing, no information was available in respect of 1971.

LIAISON ARRANGEMENTS

1. Departments of Community Medicine

DR. N. SOLOFF, SENIOR MEDICAL OFFICER FOR ADULT HEALTH

(a) *Kettering General Hospital*

The department continues to provide an increasingly useful service to the Kettering Group of Hospitals. In 1971, 978 requests for community help were made for 906 patients, compared with 1970 when 747 requests were made for 675 patients. This increase was due mainly, to a marked increase in requests by ward sisters for patients being discharged from hospital to be visited by district nursing staff.

The referrals from ward sisters included 136 females and 185 males with a fairly even spread over the age range. However, female referrals from the medical social worker outnumbered male referrals by 368 to 120, with a preponderance in the over 60 year olds.

During the year, 861 children under five years who were discharged from hospital were notified to health visitors, as were 150 children who failed to attend paediatric clinics. Of these 85 (57%) attended for a new appointment.

It has become obvious that the usefulness of the department and the efficiency with which referral for community help is made is related to the excellent knowledge of services and liaison with hospital and community staff developed by Mrs. I. Kilsby, the clerk in charge.

A further service which has been undertaken by the department this year has been the notification to health visitors of patients for whom community help has been requested, where the request is not of a purely nursing nature.

Patients are also referred where indicated, to the Health Department occupational therapists, who co-operate with the hospital occupational therapist and the community health teams.

In May, 1971, an experiment in nursing liaison was started in which Mrs. R. Cuthell undertook nursing liaison with the staff of Buccleuch Ward, Kettering General Hospital. This has been reported on in the section dealing with nursing services.

The accompanying graphs show the trend in the use being made of the Department since 1968.

Department of community medicine

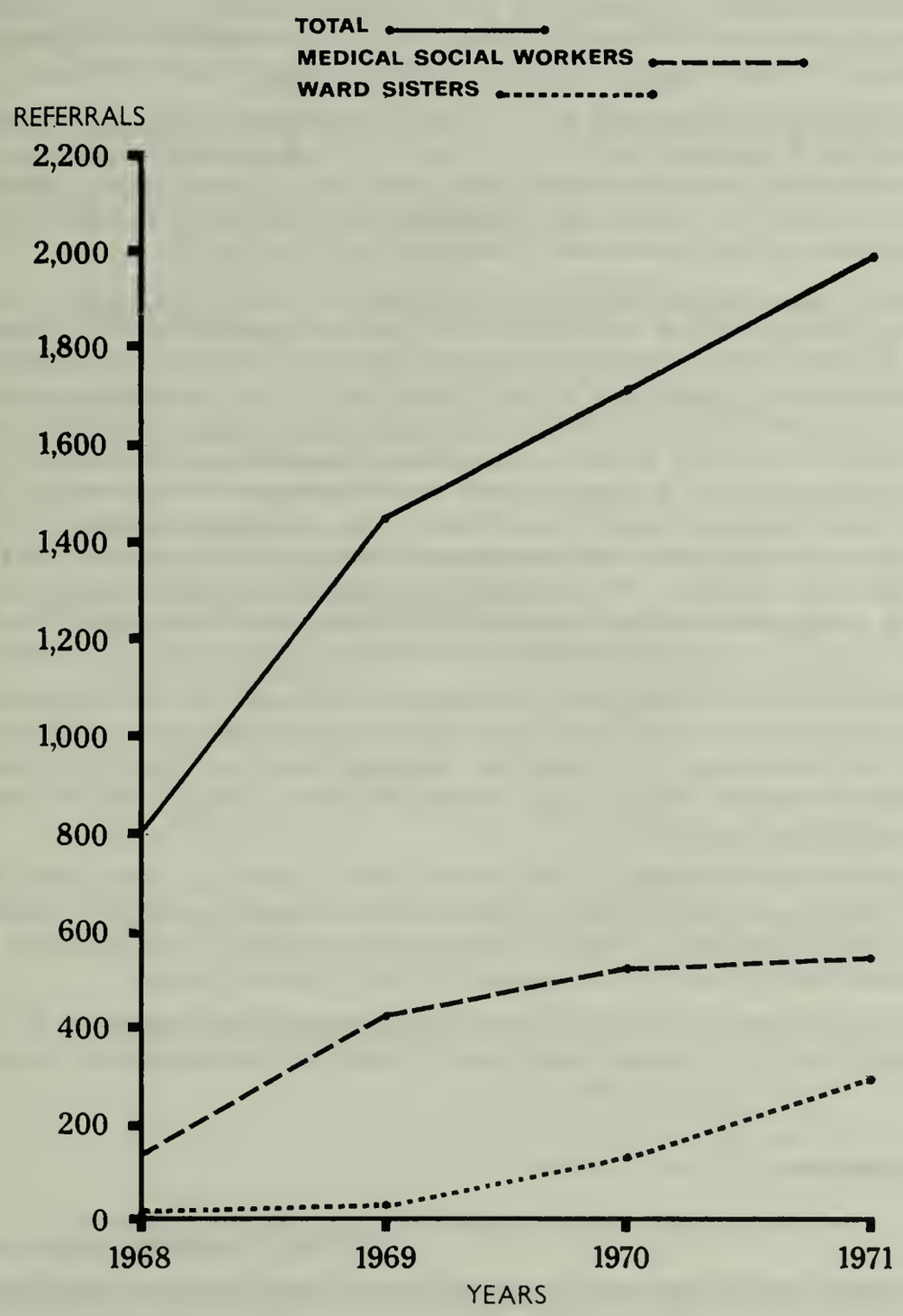
Kettering General Hospital

Referrals by hospital staff for community services

Year	*Home nurse*	*Medical loans and nursing aids*	*Health visitor*			*Home help*	*Misc.*	*Total*
			Children under 5 discharged	*Paediatric clinic defaulter*	*Other*			
1968	15	74	549	51	24	98	—	811
1969	55	174	824	143	63	174	18	1,451
1970	155	236	848	122	68	205	83	1,717
1971	319	251	861	150	59	220	123	1,989

DEPARTMENT OF COMMUNITY MEDICINE

Referrals by Hospital Staff for Community Services
Kettering General Hospital



(b) *Northampton General Hospital*

This department was established in March 1971, following the success of the Department of Community Medicine at Kettering General Hospital, and is staffed by Mrs. C. Hart, clerk in charge.

It was realised from the start that difficulties would arise if the department were only to deal with referrals for services for County patients; thus it was agreed with Dr. W. Edgar, Medical Officer of Health for Northampton, and the hospital authorities, that the department would provide a service for both local authorities. In addition to anticipating integration of the health services, the department also anticipates the future change in local government.

Discussions have been held with Mr. S. G. Hill, Group Secretary of the Northampton and District Hospital Management Committee, members of the Medical Staff Committee, senior hospital nursing staff, the hospital medical social worker and the senior hospital occupational therapist, all of whom have offered their co-operation in an endeavour to provide co-ordinated and effective care for their patients who are returning home from hospital.

During discussions with Mrs. Claridge, the hospital medical social worker, reference was made to the overlap in the provision of invalid chairs by the local health authorities and the Department of Health and Social Security, through the hospital service. Following recommendation by a hospital consultant for a Department of Health invalid chair, home assessment was made by a member of the hospital social work staff. At a meeting held in August, between Mrs. Claridge and her assistant; Dr. Soloff and senior occupational therapists from Northampton General Hospital, Buckinghamshire, Northamptonshire and Northampton County Borough, it was agreed that home assessment should be undertaken by the occupational therapists, starting on 1st September for a trial period of six months, using the administrative services of the Department of Community Medicine. The scheme has been successful so far and is due for review in March 1972. In the first four months of the scheme, 40 applications for invalid chairs and cars were made, referral to occupational therapists for assessment being necessary in 24 cases.

The service offered regarding referral of patients for community services is similar to that offered by the department at Kettering, and in the first nine months of the existence of the department at Northampton, 151 requests for community help were made for 109 patients. This compares favourably with the 187 requests for services made in the first complete year of the Kettering Department.

In addition to the notification of 1,097 children under 5 years of age to the health visitors, and of 15 children who failed to attend paediatric clinics, a scheme was developed in June by which notification of discharge (or death) of babies from the premature baby unit (Gosset Ward) is made to the health visitors. These numbered 119 in the six-month period.

As hospital staff become more familiar with the functioning of the department, it is hoped that increasing use will be made of its services, to consolidate what has been an encouraging beginning.

2. Handicapped drivers

Dr. J. Sarginson, Deputy County Medical Officer of Health

As envisaged last year, the number of applications for driving licences by persons suffering from epilepsy has increased during 1971. The assessment of suitability of persons to hold

licences continues to cause a substantial amount of work as each case is most carefully assessed before a final decision is made. Some modifications in the categories of persons who may be permitted to hold licences were introduced during the year and further changes were considered and recommendations were forwarded to the Department of the Environment by the Assistant Local Taxation Officer, based on our experiences. If the driving licence for life is introduced, the responsibilities of the medical adviser to the licensing authority are likely to be increased still further in the future.

A summary of the decisions reached during 1971 is given below:

CASES REFERRED FOR MEDICAL ADVICE

96 applications for driving licences were referred on medical grounds to the County Medical Officer of Health

70 applicants suffered at some time from epilepsy
- 8 were considered no longer suffering from epilepsy
- 46 were considered controlled epileptics
- 8 were considered as suffering from nocturnal epilepsy only
- 6 were considered as still suffering from epilepsy and it was recommended that a licence be refused
- 2 applicants decided not to pursue their applications

12 applicants reported suffering from giddiness or blackouts at some time
- 8 were considered suitable to hold normal licences
- 3 were recommended to be refused licences
- 1 decided not to pursue application

5 applicants suffered from diabetes
- All were considered well controlled and recommended to hold normal licences

9 applicants suffered from other diseases or defects

1 suffered from Parkinsons Disease	It was recommended he be granted a normal licence
1 suffered from double vision	It was recommended he be granted a normal licence
1 suffered from a congenital heart condition	It was recommended he be granted a normal licence
1 had been fitted with a cardiac pacemaker	It was recommended he be granted a normal licence
1 suffered a stroke	It was recommended he be refused a licence as being subject to loss of consciousness etc.
1 suffered a leg injury	It was recommended that this applicant be granted a provisional licence only and that he undergo another driving test
3 suffered from some form of mental disorder	1 was recommended to be granted a normal licence
	1 was refused as being liable to detention under the Mental Health Act etc.
	1 was refused, but the case will be reviewed in 6 months

3. Other activities undertaken by the staff

As stated in the section dealing with Health Centres, a large number of visitors were interested in these buildings.

A District Officer from the Selangor State Government of Malaysia and an Assistant Registrar, Co-operative Department, Government of Rajasthan, Jaipur, India, visited the County, under a scheme for the attachments of overseas students, and spent some time in this department.

Officers from various Government Departments visited the County to discuss the dental services and school health services.

Medical Officers of Health from other Authorities were interested in the mobile health clinic and the Departments of Community Medicine.

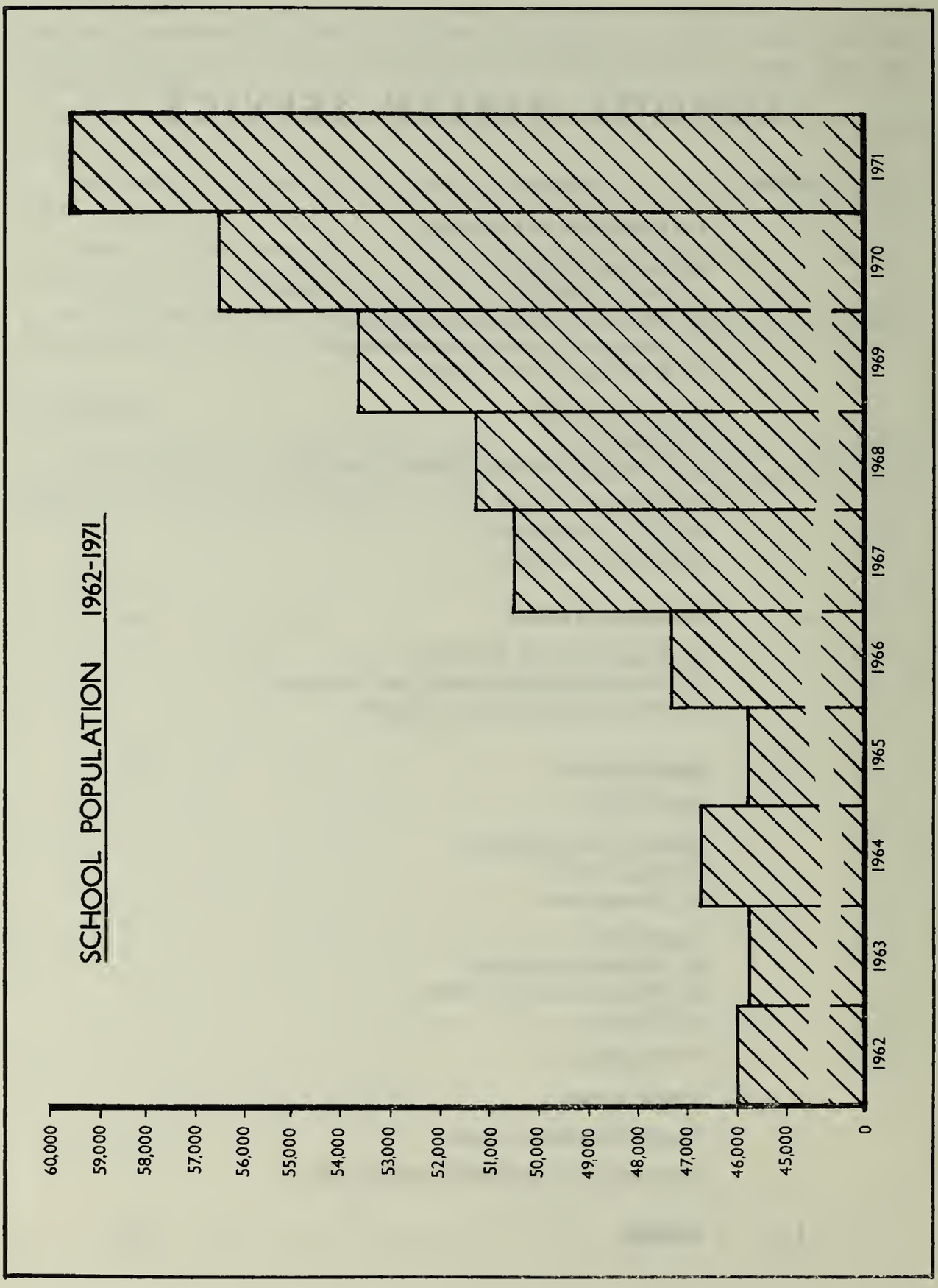
Officers of this Department paid visits during the year to other Authorities mainly in connection with the computerisation of the school health records.

Mr. R. J. Bruce was re-elected Chairman of the Midland Group of the Association of Health Administrative Officers for the third consecutive year.

4. Publications

"The Role of the Community Physician in the Mental Health Service"—Dr. W. J. McQuillan. (Published in *Public Health* Vol. 85, No. 5.) Based on a talk given to the Mental Health Group of the Society of Medical Officers of Health on 10th April, 1970.

SCHOOL HEALTH SERVICE


SCHOOL POPULATION 1962-1971
60,000
59,000
58,000
57,000
56,000
55,000
54,000
53,000
52,000
51,000
50,000
49,000
48,000
47,000
46,000
45,000
0
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971

I. THE GENERAL SCHOOL POPULATION

MEDICAL EXAMINATIONS

(a) Work undertaken by school medical officers

During 1971, three medical officers already experienced in local authority work joined the staff and a further six general practitioners started to do routine medical examinations at schools in the areas of their practices.

	Number of sessions
School medical examinations	738
Visits to special schools	116
Special examinations	314
Liaison visiting	21
Enuresis clinics	15
Hearing assessment and audiology clinics ...	77
Teacher medical examinations	72
	1,353

The proportion of time allocated to the special schools is large in relation to their number but it is essential to pay frequent visits to these schools in order to keep a close watch on the progress of handicapped children. Also, the transfer on 1st April 1971 of the former junior training schools from the Health Committee to the Education Committee increased by 66% the population of handicapped children attending special schools in the County.

All the special schools, with the exception of Arkwright School for maladjusted girls, are visited on average once a month by one of the two senior clinical medical officers who carry out routine medical examinations and arrange case conferences to discuss particular problems as they arise. At Arkwright School the general practitioner for the school also carries out school health service functions.

(b) Number of schoolchildren examined

A total of 10,068 children received routine school medical examinations, almost double the number seen in the previous year. This has been achieved by a more efficient use of medical officer time, assisted by the additions to the medical staff which has made it possible to visit more schools. A detailed table relating to school medical examinations is on page 112.

(c) Comments by school medical officers

Dr. J. F. Woolfenden reports that the main concern in the schools she visits is the increasing number of behaviour problems and maladjusted children.

Dr. R. Puddifoot has been making a limited study of children with cross laterality and relating this finding to the number of times the parents spontaneously described the child as slow at learning, particularly in reading. The parents' assessment was subsequently checked against the head teachers' assessment of the children. Though about one third of the children considered to be slow by their parents were not giving rise to anxiety in school, in no case was the teachers' assessment as a slow learner not confirmed by the parents' estimate.

A series of 96 children was studied.

	No. tested for laterality	*Slow to read*
Right-sided dominance	38	2
Right dominant except eye	21	2
Right preferred but ambidextrous ...	11	1
Ambidextrous except foot	4	1
Ambidextrous except hand	3	1
Ambidextrous except ear	1	1
Left-sided dominance	3	0
Left dominant except foot	4	3
Left dominant except eye	1	0
Left dominant except ear	1	0
Left preferred but ambidextrous ...	1	0
Ambidextrous with left ear dominance	3	1
Ambidextrous with left eye dominant ...	5	1
	96	13

The conclusion she draws from this series is that the most confusing combination is to be left sensed and right footed, as three of the four children showing this were slow to read. Of the ambidextrous children, three were slow learners but of the ten children showing two left sided preferences and two right sided preferences, none was slow.

(d) **Provision of milk in schools**

In July, information was received from the Department of Education and Science regarding the new regulations governing the provision of school milk which, from the beginning of the autumn term, 1971 is supplied automatically to children in special schools and children up to the age of seven years. Children between the ages of seven and eleven years receive milk only if the school medical officer certifies that the child's health requires that this should be supplied.

It was necessary, therefore, to identify children in the seven to eleven year age group who might need milk on health grounds, and referrals were received from a variety of sources. School medical officers and health visitors were asked to bring forward the names of any children known to them whom they considered eligible for free milk. In addition, medical officers have been asked to indicate for re-examination at the appropriate age, younger children who may become eligible at the age of seven years. Head teachers were asked to submit the names of children they considered would benefit from free milk, and the needs of children receiving free school meals have also been considered.

Arrangements are being made for the children referred for consideration to be seen by a medical officer, and at the end of the year, 374 had been seen, of whom 310 were recommended to receive free school milk.

INFECTIOUS DISEASES

(a) **General**

In 1971, 53 notifications of the occurrence of infectious disease involving 363 pupils were received from schools, 39% of whom were suffering from german measles.

Dr. F. R. N. Lynch has reported on the following outbreaks:

Paratyphoid B fever. A case of Paratyphoid B fever in a ten year old child, contracted whilst on holiday in Italy, was notified in September. The child's mother, a school teacher, was excluded from school for a period of one month. The child responded well to treatment and it was not necessary to admit her to the isolation hospital.

Food poisoning, Corby. In June a school canteen cook was suspended from her occupation because of contact with a case of infectious disease (Salmonella infantis). She was excluded for a period of three months.

Measles was fairly widespread during the year. There were one hundred and fifty cases at Rushden, seven-one cases at Irthlingborough and six hundred and fifty-three cases at Corby. The number of cases of measles in Corby for each year for the past five years is given here.

Year	1971	1970	1969	1968	1967
Cases	653	136	218	450	835

The campaign for the control of and, it is hoped, ultimate eradication of measles by vaccination was commenced in the autumn of 1968.

Bacillary dysentery. A small number of cases of Sonne's dysentery occurred during the year and again most of the cases notified came from Corby. Appended here are the numbers of cases occurring in school children in Corby during the past five years:

Year	1971	1970	1969	1968	1967
Cases	16	20	5	12	—

Infectious hepatitis. In recent years a large number of cases of infectious hepatitis has been notified in Corby school children but only one such notification was received this year. The following table shows the numbers of cases in the last five years:

Year	1971	1970	1969	1968	1967
Cases	1	7	100	60	6

Gastro-enteritis. An outbreak of gastro-enteritis occurred in Beanfield Infants School, Corby, in March. At its peak about 100 children were absent from school.

Thorough disinfection of taps, toilets, floors and furniture was undertaken under the supervision of the public health inspectors and the outbreak had subsided by the end of the month.

Head lice infestation. Troublesome infestation was observed in three Corby schools in the first half of the year and this was effectively dealt with by the vigorous action taken by the two school nurses.

School toilets. Special inspections of the lavatories at Wilbarston C.E. School and Wharf Road, County Infants School, Higham Ferrers, were made and a report on the conditions found was in each case forwarded to the Principal School Medical Officer.

Appropriate measures for the improvement of the facilities available have been taken.

(b) Control of infectious diseases in schools

In May, a memorandum on the control of infectious diseases in schools, prepared jointly by the Department of Education and Science and the Department of Health and Social Security,

was received. The recommendations about exclusion from school because of infectious diseases have been revised and rationalised. The exclusion periods for cases of many of the common infectious illnesses have been shortened and the exclusion of contacts is now recommended for only a small number of diseases. More attention is given to the intestinal infections with particular emphasis on the need to obtain bacteriological clearance under the supervision of the medical officer of health before the child is allowed to return to school.

A new table for the guidance of head teachers was prepared from this memorandum and was circulated in draft form at the beginning of the new school year in September. Copies were sent at the same time to all general practitioners in the County. As soon as it is known that the draft table is providing head teachers with the information they require, it will be printed in permanent form.

VACCINATIONS IN SCHOOLS

(a) B.C.G. vaccination

As a campaign to encourage rubella vaccination was being launched, and vaccination was being offered to girls in the same age group, it was decided that B.C.G. sessions should be held over until all 13 year old girls had been vaccinated against rubella and consequently less children received B.C.G. vaccination in 1971 than in previous years.

All children with Heaf positive grades 2, 3 and 4 were X-rayed but no X-rays showed any evidence of disease.

(b) Rubella vaccination

In July 1970, the Chief Medical Officer of the Department of Health and Social Security informed local health authorities that the Joint Committee on Vaccination and Immunisation had recommended that vaccination against rubella should be offered to all girls between their 11th and 14th birthdays, and that supplies of vaccine would shortly be made available.

It was indicated however that because of the known association of certain foetal abnormalities with rubella infection, initially as many girls as possible should be protected before they reached child-bearing age and priority should be given to older girls, i.e. those in their 14th year of life.

A comprehensive campaign was launched which included press interviews, clinic displays, talks, literature to general practitioners and health department staff.

General practitioners were first given the opportunity to vaccinate their own patients, and in May the Health Department commenced sessions in schools for those children who, for various reasons, had not been vaccinated by their general practitioners. In the course of the next two months 1,186 girls attending 42 schools had been vaccinated.

Anglia Television expressed interest in filming a session and a mobile film unit visited Wellingborough High School for Girls on 12th May, and a report was televised in "About Anglia" the same evening.

In September, sessions were recommenced to vaccinate 12 and 13 year olds who had not attended their general practitioners, and in the following weeks a further 1,375 girls were vaccinated.

During 1972 all girls in the recommended age group should be protected against german measles and henceforward 12 year olds will be offered the vaccination routinely in schools.

II. HANDICAPPED CHILDREN

Dr. I. J. Cope, Senior Clinical Medical Officer

(a) Kingsley School, Kettering

There were 74 children on the school roll at the end of the year, 10 of these being in the observation class. Once again the two main groups were cerebral palsy (15) and spina bifida (10).

Twenty-one children left the school during the year as follows:

Physically handicapped:

To normal school	5
residential special school	2
residential grammar school	1
Employment	3
Left district	1
Excluded	1
Died	2
	15

Observation class

To normal school	3
special school	2
residential placement	1
	6

The three pupils who obtained employment have managed to hold their jobs. It is true to say however, that only one of these had a serious physical handicap. I anticipate in general that it will be 1975 before severely handicapped children are leaving the school. Informal discussions are being held between the school, the careers advisory service and myself, regarding the problems that they will meet in seeking employment.

It is with regret that one has to report the two deaths—one child with congenital heart disease and one with spina bifida.

An extension of the work of the school has been the proposal to establish a youth club for former members of the school. It is to be open to physically handicapped young people living within the catchment area of the school. It is hoped that the club will fill a gap which exists in the area. At the same time it will enable the school to keep in touch with old pupils and learn of the problems which they meet in the community.

(b) Avondale partially hearing unit, Kettering

The work of this small unit has continued throughout the year. It is still handicapped however by the wide range of the pupils (5-11 years) and the range of hearing losses. It is hoped that the former handicap will be removed by the provision of an infant unit.

During the year two children were admitted to the unit and two were transferred to ordinary schools, one of these whilst awaiting placement in an E.S.N. School.

There are ten children on the roll.

(c) Educationally subnormal schools

Dr. I. J. Cope, Senior Clinical Medical Officer

The demand for places within these schools continues to grow. There is a considerable number of children attending these schools who, on account of unsatisfactory home backgrounds, have emotional problems and require even more help than they are receiving at present.

Firdale School, Corby	
Number on roll	95
Leavers in 1971:	
To employment	4
Adult training centre	1
Special care	1
Non employed	2
Left district	1
Isebrook School, Kettering:	
Number on roll	100
Leavers in 1971:	
To employment	14
Assessment centre	1
Ordinary school	1
Left district	2
Loddington Hall School, Kettering:	
Number on roll	50
Leavers in 1971:	
To employment	7
Normal school	3
Other special school	1

Forest Gate School, Corby,
Henley School, Kettering

Within these two schools there is a very wide range of age, ability and additional handicap.

The I.Q.s range from untestable to about 70. In the latter case there are social problems which have prevented the child integrating within another E.S.N. school.

Within the classification, additional handicaps are epilepsy, cerebral palsy, partially sighted, partially hearing and muscular dystrophy.

	Forest Gate School		*Henley School*	
	Boys	*Girls*	*Boys*	*Girls*
2 years	—	—	1	—
3	—	—	2	—
4	3	1	2	3
5	4	3	2	4
6	—	2	3	3
7	4	1	5	7
8	3	4	3	3
9	6	1	7	2
10	5	—	4	4
11	5	6	2	1
12	3	—	3	2
13	4	4	5	4
14	2	—	1	1
15	6	2	2	2
16	—	2	—	—
	45	26	42	36

It is interesting to note the very considerable sex difference at Forest Gate School in the 9 and 10 year groups—11 boys, 1 girl.

The important needs for these two schools are (i) the provision of additional special care units. The number of children who are very severely handicapped is continually increasing and a considerable number of these will always require special care. I would suggest that each school should have at least two special care classes to cater for the wide age range which they have. If the units are not provided it will mean that there will be only minimal part-time attendance. (ii) the provision of physiotherapy.

Dr. L. Glynn, Senior Clinical Medical Officer

Dallington Park School

Total number on roll 51
Boys 27
Girls 24

Age
3 — 2
4 — 4
5 — 6
6 — 3
7 — 5
8 — 4
9 — 6
10 — 3
11 — 5
12 — 3
13 — 3
14 — 6
15 — 1

I.Q.
Less than 30 — 7
30-39 — 9
40-49 — 11
50-59 — 10
60-69 — 2
70-79 — 3
Untested — 9

Diagnosis

Down's syndrome	11	
Perinatal injury	11	
Post-natal injury	2	—1 due to Gastro-enteritis —1 due to Pertussis
Culturo-familial	6	
Autism	1	
Prader-Willi syndrome ...	2	
Muscular dystrophy	2	
Pierre-Robin syndrome ...	1	
? Tuberose sclerosis	1	
Genetic	7	
Unknown	9	

The term " Culturo-familial " refers to those children who come from poor families with retarded relatives, and in whom it is impossible to estimate the relative importance of the poor environmental or genetic factors.

There are three children on the waiting list to be transferred to Brookfield School for slow learning pupils. In addition, one child was recommended for Brookfield School but the boarding place was refused. One child will probably be transferred when she is a bit older. Another child will probably move to the John Greenwood Shipman School at the age of five. There are now five children on the waiting list for Dallington Park School.

Brookfield School, Wellingborough:

Total number on roll 110
Boys 50
Girls 60

Age	I.Q.
8 — 4	40-49 — 2
9 — 9	50-59 — 16
10 — 10	60-69 — 44
11 — 10	70-79 — 35
12 — 17	80-89 — 8
13 — 17	Untestable or no
14 — 19	figure available 5
15 — 16	
16 — 8	

Diagnosis

Culturo-familial	76	
Perinatal injury	24	
Post-natal injury	2	1—due to road accident 1—due to head injury
Cretin	1	
Sturge-Weber syndrome ...	1	
Unknown	15	

Additional Handicaps

History of epilepsy or febrile convulsions ...	10
Behaviour problems	12
Hearing defect	1
Appreciable physical handicap	1
Albino	1

Fairlawn School, Wellingborough:

Total number on roll 106
Boys 63
Girls 43

Age

2 —	1
3 —	4
4 —	6
5 —	16
6 —	12
7 —	10
8 —	9
9 —	16
10 —	7
11 —	5
12 —	7
13 —	6
14 —	5
15 —	2

I.Q.

Less than 30 —	30
30-39 —	6
40-49 —	7
50-59 —	16
60-69 —	9
70-79 —	5
Untested	33

Diagnosis

Down's syndrome	20
Perinatal Injury	15
Post-natal Injury	2
Culturo-familial	28
Autism	3
Rubella syndrome	2
Infantile hypercalcaemia ...	1
Genetic	12
Unknown	9

Additional Handicaps

Speech defect	10
Epilepsy	13
Visual defect	4
Hearing defect	2
Behaviour disorder	5
Physically handicapped ...	3

Of the five children with I.Qs. above 70, one has already failed a trial at Brookfield Special School, one is emotionally disturbed as well as slow learning and consequently could not be managed at Brookfield School. One is a nervous child with a serious speech defect and not yet ready to be moved to Brookfield School. Two more children are awaiting review of their placement.

III. SPECIAL SERVICES

DENTAL HEALTH

MR. P. W. GIBSON, CHIEF DENTAL OFFICER

(a) Introduction

The year's activities were greatly influenced by a reduced availability of full-time professional staff. In the course of the year one full-time dental officer resigned, another was unable to work from April onwards because of an injury sustained accidentally, and a third was on leave of absence completing the London course for the Diploma in Dental Public Health. Neither of the full-time posts thus vacant was filled during 1970, but it was possible to compensate partly for this by increasing the number of sessions worked by part-time dental officers and an auxiliary. As a result the total number of sessions completed, both for treatment and inspection fell in 1971 and the inspection coverage of children in school and clinics at 56% fell by 9%.

(b) Staff

The number of full-time professional dental staff in post at 31 December 1971 was eleven. In addition, there were six part-time dental officers, with a real full-time equivalent of 2.1. There were three full-time, and one part-time, dental auxiliaries. Overall, a full-time equivalent of professional staff of 13.1 together with 3.4 of dental auxiliaries, compared with 13.7 full-time professional staff and 3.0 dental auxiliaries in 1970. Vacancies exist for the equivalent of 0.5 of a dental officer.

Furthermore, the schoolchild population increased by 3,198 to 59,618.

(c) Research

Clinical trial

During the autumn term a clinical trial of a preventive dentistry paste was commenced at twelve schools throughout the County. It has been claimed that this paste has reduced the rate of dental decay when used only twice a year by children at school. The study is being carried out in co-operation with the Department of Dental Health, University of Birmingham, and is one of three trials of the paste in progress in Europe at the present time. Results of the study are not expected until 1974.

Nuva seal fissure sealant

This is a new technique designed to be applied to sound teeth in order to maintain them in a healthy state. It may prove to be too expensive for general use but a small scale feasibility study was carried out at Rushden Clinic in an attempt to assess its value and efficacy. Expensive equipment was loaned for this purpose and our enquiry centred around approximately one hundred and twenty teeth.

We look forward to the results of this small enquiry in about six months' time.

Scunthorpe/Corby fluoridation study

The third year of this seven-year study was completed according to schedule.

The baseline figures of this survey were published in the British Dental Journal (132: 1 Jan. 1972, p. 30) as part of an Information Service on Epidemiological Studies.

NEW MOBILE DENTAL CLINIC

(Photograph by kind permission of Hill Bros., Ltd.)

(d) **Dental health education**

Effective health education depends upon the educator, the learner and the behavioural goals (WHO Technical Report 449: Dental Health Education, 1970). Talks are given to influence behaviour, for " public relations " and to provide information about dentistry and the scope of treatment and preventive methods available. During 1971, 330 talks to 9,500 schoolchildren and over 450 adults were given by three members of staff. The adult groups consisted of teachers, health personnel, local clubs and societies.

Assessment of success from talks is almost impossible since the measurement of success lies in behavioural change. At the same time we feel that these talks give a basic knowledge which all children should have. Sociological studies indicate that for health behaviour, children do as their mother does, not as she or anyone else says.

Talks to antenatal groups have increased during 1971 with much help from the district nurses organising the classes. Some methods of involving young teenagers in tooth care are being investigated in a survey in Corby schools. The project method of interesting children in dental health holds exciting possibilities.

(e) **Fluoridation**

Fluoridation is a major part of any preventive programme. Its presence in our water supplies at a level of one part per million is overdue, since our children are suffering so much unnecessary dental disease, decay, disfigurement and emotional disturbance.

The film " Natural Choice " which deals with fluoridation was used many times in talks to mothers' clubs and antenatal groups, and gave rise to a feeling of need for action in many of these groups.

(f) **Staff development and training**

(i) *Dental surgery assistants course*

The first training course for dental surgery assistants was commenced in October with the co-operation of Northampton Technical College. Like others of its kind in different parts of the United Kingdom, this prepares girls for entry for the examination for the National Certificate awarded by the Examining Board for Dental Surgery Assistants. Five of our dental surgery assistants have already successfully completed this examination and hold the National Certificate.

The existence of a course in Northampton provides a much-needed centre, girls from this area having had to travel to Coventry or Leicester in previous years. Five of our own staff are attending the course.

(ii) *District nurses training school*

Two courses per year are held in Kettering for comprehensive training of district nurses. Included in the syllabus of this course is a section on dentistry and dental health, and members of the dental staff are invited to contribute on these occasions.

(iii) *Meeting on integrated services*

A planned staff meeting involving general dental practitioners and dental staff of the Oxford Regional Hospital Board to discuss integration of services was postponed, because of the lack of firm government proposals upon which discussions would centre.

The value of such a meeting will be enhanced if it is planned to coincide with the eventual publication of the firm and more detailed structure for re-organising health services.

(g) Dental services for handicapped children

Joint appointments with the Princess Marina Hospital of a dental team were approved in principle but only the appointment of a hygienist was sanctioned for the current year. Interruption in the building programme at the Princess Marina Hospital also delayed plans for the development of this service.

(h) Orthodontics

At least half the child population of Britain have some form of malocclusion and over half of these would benefit by treatment.

Apart from the child's improved facial appearance, the psychological effects of which can be profound, the correction of tooth irregularities reduces a disposition to caries and gum disease.

Northamptonshire children are receiving increasing benefits from planned orthodontic treatment and the demand for treatment grows.

Since the appointment of Mr. J. Pettman as Consultant Orthodontist to the Hospital Board, orthodontics in the School Dental Service has developed rapidly. His teaching in lectures and at the chair-side in clinics has been invaluable. Over six hundred cases were under treatment in 1971, fifty-two of them with fixed appliances.

Mr. Pettman continues to visit all County clinics, advising dental officers on diagnosis and treatment of their patients, and undertaking advanced work for the more complex cases.

Cleft-palate cases needing tooth movement are treated under the supervision of the consultant orthodontist. Liaison is maintained with the oral surgeon who carried out the cleft-palate repair.

The importance of treatment planning by all dental surgeons engaged in the dental care of children cannot be over-emphasised.

(i) Acknowledgements

My thanks are due to my clinical and nursing staff and to the administrative staff; to Mr. J. Pettman for his constant readiness to discuss the broader issues of children's dentistry, and to Dr. D. W. Robertson for his dual contribution in screening children at risk and for his administration of anaesthetics, and to Doctors Box, Bruton, Howell, Lilly and Lucas, for their constant service as anaesthetists.

SCREENING TESTS IN SCHOOLS

Routine screening of children's vision and hearing is carried out at regular intervals, whilst special tests are carried out on request.

The following shows the number of tests carried out and the number of children referred for further assessment.

(a) **Vision tests**

	1971	1970
Number of tests, routine	19,952	19,592
special request	249	356
re-examinations ...	961	695
Total	21,162	20,643

Referred for examination by a specialist	1,213	5·7%
Colour vision tests, passed	3,769	
failed	102	(2·6%)
Total	3,871	

(b) **Hearing tests**

Sweep tests	1971		1970	
Number of tests	5,861		6,370	
Number of children referred to assessment clinics ...	268	(4·6%)	340	(5·3%)
Special referrals				
By school medical officers	95		117	
head teachers	179		190	
school nurses	37		34	
speech therapists	27		33	
parents	26		22	
family doctors	71		55	
others	32		15	
Total	467		466	
Number still awaiting a test	57		18	
Number seen	410		448	
Number referred to assessment clinic	89	(21·7%)	117	(26·1%)

SPECIAL CLINICS

(a) Children's eye clinic

From November, the school eye clinic previously held at Stockburn Memorial Home, Kettering, has been transferred to the Ophthalmic Out-Patient Department at Kettering General Hospital where Dr. R. Ingram, Consultant Ophthalmologist, now has a fortnightly clinic exclusively for children. This arrangement offers two advantages. All children can have ophthalmic examination under ideal conditions and the school nurse attending the children's eye clinic can report back on the advice given about the use of spectacles.

The aim of the re-organisation is to provide a better service for children with visual defects and to enable the consultant ophthalmologist to make better use of his time by referring on to opticians children with simple refractive errors.

At the end of the year, plans were being discussed for making similar arrangements for unifying the local authority and hospital eye clinic sessions in Wellingborough and Corby.

	Sessions held	Children seen: New cases	Children seen: Old cases	Children seen: Total
Corby	17	211	304	515
Kettering	20	205	293	498
Northampton	23	163	191	354
Rushden	16	97	151	248
Wellingborough	38	237	289	526
Brackley	—	—	—	—
Banbury	3	11	26	37
Totals	117	924	1,254	2,178

Spectacles were prescribed for 690 children. At the end of the year 76 children were on the waiting list to be seen by ophthalmologists.

(b) **Hearing assessment clinics**

Twenty-one hearing assessment clinics were held (eight at Corby, six at Wellingborough, five at Kettering and two at Rushden) and, in addition, a meeting was held each month at the Audiology Department, Northampton General Hospital with the peripatetic teacher of the deaf, the audiometric nurses and Mr. O'Reilly, the hospital departmental technician. The purpose of this meeting is to give members of the team the opportunity of case discussion and for seeing cases together that have been referred to the ENT specialist who holds a clinic at the same time as this meeting. The ENT specialist joins the meeting from time to time and is always willing to give advice on any points that require elucidation.

Children attending the clinics after failing the routine screening test are examined by a medical officer and, if necessary, referred to their family doctors or directly to ear, nose and throat specialists, after the general practitioners have been consulted.

Number of clinics held	57
Number of children seen	378
Number of children referred after examination to	
(a) General practitioner	3
(b) Specialist	27

(c) **Enuresis**

Daventry Enuresis Clinic—Dr. J. M. St.V. Dawkins

The clinic, which is now in its ninth year, was moved two years ago from the Secondary Modern School to Daventry Health Centre, where the improved facilities, proximity to the general practitioners, nursing staff and laboratory services have greatly enhanced the working of the clinic both for staff and for the patients.

The patients attend from the town of Daventry and the surrounding district, transport being provided for those who need it. Attendance is good. Patients are referred by the general practitioners, nursing staff and occasionally by the staff of the schools, or requests are made by the parents themselves. The age of attendance is between six and sixteen years—the majority in the 6-8 age group. Usually treatment is not started until the age of six years though exceptionally, especially when two or more members of the family are attending, it may commence earlier.

Last year a detailed outline of the conduct of the clinic was given and the routine procedures, modified by experience, continue. Briefly the children fall into two categories: the later developers who have never been dry, usually with no psychological disturbance, who respond successfully to treatment, and the second, with varying periods of control with lapses, and who invariably show some psychological disturbance in their background. In the latter, results are never straightforward, but have this year been encouraging. To these, patience and a philosophical approach to the parent, who often over-reacts to the situation, is applied. The attitude that enuresis is a " nuisance " but not a " tragedy " is adopted.

This year I have had three children who became dry and have remained so after one attendance at the clinic. I can make no claim for these " instant " cures, but they do occur to the delight of parents and children.

I refer to last year's report for details of methods of treatment which have been similar this year, and briefly, consist of a first visit lasting at least half an hour, when the history is taken in detail (every child is carefully screened for organic disease), pamphlets are given, and the endeavour to establish confidence in a successful outcome is made. The children start their own calendar and perhaps for the first time begin to take a personal interest in their cure. At the second or subsequent visit the electric buzzer may be used.

Corby Enuresis Clinic—Dr. D. P. Curran

Owing to pressure of work, Dr. Curran had to give up at the Corby enuresis Clinic on 6th October 1971. The following is a report by Dr. Curran on the work of the clinic during the eighteen months when it was under his control.

I enjoyed taking the enuresis clinic and completed eighteen months. During that time I saw 70 cases, 21 girls and 49 boys. 25 children became dry, 7 became more than three-quarters dry and we had 38 failures. The presenting ages were divided into two groups, one around 6, 7 and 8 and another from 10 onwards.

Presenting age:	4	5	6	7	8	9	10	11	12	13	14	15
No. of cases:	1	1	21	11	15	9	1	4	2	3	1	1

The large number of children in the 6-8 group reflects referrals following school medicals. The 10-15 age group were often referred through g.p.'s and health visitors following a request for help from the mothers. Of this second group comprising 11 children, only two became dry and two three-quarters dry.

Not every case was tried on the bell. I felt that for one month the children might keep a record of dryness or wetness. Only those who managed to keep this card were tried on the bell. This in itself sorted out many children who seemed unable even to keep a simple record. Frequently, after a difficult start with these cards, the children later failed on the bell because of the bells' recurrent mechanical failures.

The bell was tried on 36 children with 17 failures and 19 successes. Of these 19 successes 13 followed only one month's use of the bell. This group of 13 comprise the justification for the clinic and the use of the bell. These children respond dramatically and once dry remain so. All but one of the 13 children in this group were in the 6-9 age group.

There remain the 38 failures. An immediate and persistently frustrating feature of the clinic was non-attendance. Children who became dry failed to attend on 25 occasions whereas children who remained enuretic failed to attend 35 times. After a letter and two non-attendances

the children were discharged as " failures ". Five cases were only seen once and showed frank psychological family problems. I felt these children would not be helped by the clinic and discharged them as " failures ", to their own g.p.'s.

The ideal child to treat with the bell was a boy from 6-9 years old with a history of nocturnal incontinence since birth. Maternal parental interest, less than 4 siblings and regular attendance usually led to sudden continence after one month on the bell.

Nos. of Sibs.	0	1	2	3	4	5	6	7	
Successful cases	3	7	8	6	5	1	2	0	32
No. of Sibs.	0	1	2	3	4	5	6	7	
Unsuccessful cases	0	6	7	9	8	4	2	2	38

Factors which favoured failure were; age greater than 10 years, more than 4 siblings, social complications, parental divorce, separation, illness or unemployment, irregular attendances, attendances alone or with someone other than the mother and finally, inability to present an up to date record card.

Enuresis, therefore, appeared symptomatic of several pathologies. Purely medical causes seemed rare, only 4 children showed urinary infections and only one of these was recurrent, incidentally also having a spina bifida occulta. 13 cases suggested a delayed conditioning and 38 cases suggested a psychosociological aetiology where the enuretic child was a symptom of a family problem. It was noticeable that nocturnal urinary mismanagement in this latter group often mirrored parental social and uterine mismanagement.

	Corby	*Daventry*
New cases seen	33	13
Total attendances...	110	126
Number cured	12	13
(a) with buzzer	8	10
(b) without buzzer	4	3
Number referred to psychiatrist	—	1
Number referred for full organic investigation	1	3
Failed to keep further appointment	9	7
Moved in course of treatment	—	3
Number under treatment at end of year ...	12	31
Number on waiting list	20	—

Enuresis alarms:

Issued and returned during the year	93
On loan at 31st December	64
Patients on waiting list	79

CHILD GUIDANCE

This report by Dr. K. Stewart, Consultant Psychiatrist, refers only to the Northampton County Borough and the Southern area of the County.

Psychologists. No trained replacement was obtained for Mr. P. Gardner who left at the end of 1970. Mr. G. Callow, a trainee, started on 1st October 1971. Educational psychologists

work about two-thirds of their time in the School Psychological Service and about one-third in the Child Guidance Service.

Social Workers. Miss L. Sekules left. Miss C. Horrocks and Mrs. P. Hawker were transferred to new posts after the formation of the new Social Services Department. Mrs. N. Wilson started part-time on 8th June 1971. This meant that the social work of the clinic depended entirely on the equivalent of 2/5 of a social worker towards the latter part of this period.

Psychiatrists. Dr. J. Gordon, trainee psychiatrist, had to reduce her sessions to two per week i.e. one clinical and one supervisory discussion session.

No appointment of a child psychotherapist was made.

The even greater paucity of staff during 1971 shows in the statistics. There has been the virtual abandonment of trying to provide a general child and family psychiatric service. A policy of dealing directly only with those cases which seemed in most urgent need of the particular skills we could provide at the clinic was maintained. Others who needed help but could be coped with by other professionals were not seen, though they were kept on the nominal waiting list. The decision about which cases were most urgent had to be ours and not that of the referral agency who could not compare all the cases. This resulted in considerable hostility when our estimate of urgency did not agree with that of the referrer.

This emphasises, even more, the correctness of the policy of maintaining a consultative service even though a specialist service which would " take over " cases was asked for. Of course, those cases dealt with by this " enabling " service do not show in statistics.

It may well be that the smaller number of referrals is a result of the consultative service. Those agencies who would otherwise have referred more cases may now find they are able to cope with help from the clinic. However, as the expansion of Northampton and the County proceeds, referrals will increase at a greater rate than the reduction as a result of the " enabling " service. Without appropriate staff the waiting list will simply get longer.

Educational work by clinic staff continues both inside and outside " normal " work. Regular seminars, lectures, courses of various kinds take place as well as irregular occasional and ad hoc arrangements. Training others is an essential part of the philosophy of work in the clinic as well as seizing as many opportunities as possible of gaining further experience and skills ourselves.

The problem of residential placement of children and adolescents remains. There are still no local hospital facilities for children with psychiatric problems.

The following is an extract from the report on the Department of Child and Family Psychiatry, Kettering, by Dr. B. S. Phillips, Consultant Psychiatrist.

The work is nearly all in outpatient clinics, sessions being held both at the Kettering General Hospital, Corby Diagnostic Centre, Isebrook Hospital, Wellingborough (in which we shall be starting to hold clinics before long), and local authority clinics within the area.

We have an arrangement with the Paediatric Department, whereby we admit certain types of emotionally disturbed children direct to Highfield Hospital where they are managed and

treated amongst children who are convalescing mainly from physical disorders. The value of controlled *therapeutic* separation of family members is still being evaluated.

Staff. Dr. E. M. Sutherland, Senior Research Registrar, Oxford Regional Hospital Board, has been working with us for two sessions a week; one at the Kettering General Hospital and the other at the Corby Diagnostic Centre, until he left in September to take up a consultant post in the Birmingham area.

It was mentioned in last year's report that we have started making a contribution to the vocational training scheme for general practitioners in the Kettering area. The trainee spends six months of his three-year course with us, shared with the adult psychiatrists in the area.

Dr. Michael Lane was with us from the 1st February to the 31st July 1971, and his place was taken after that by Dr. Philip Jackson, who remains with us until the end of January 1972, when we have the next successive senior house officer in post.

During his six months, the trainee attends a week's course, which is designed for general practitioners, at the Institute of Family Psychiatry at the Ipswich and East Suffolk Hospital.

Mrs. Cecile Goorney, Senior Clinical Psychologist, Department of Clinical Psychology, St. Crispin Hospital, was seconded to the Department for one day a week, until September.

Since the re-organization of the Local Authority Social Service Department, we have had no specific social workers attached to the team, although Miss J. Bland, who was formerly a team member, still works in close association with us.

Statistics. Previously I have given the number of patients referred and seen, but have now changed the statistics in terms of family groups. These, of course, mean anything from two to three people to a dozen or more, or even greater figures, where we take in an extended family situation. The figures are included in the table on page 119.

SPEECH THERAPY

Mrs. A. Hamida, Senior Speech Therapist

As the population in Northamptonshire increases so do the numbers of children requiring speech therapy and to help deal with this increase, the service was this year increased to an establishment of 8½ speech therapists.

At 31st December 1971, 1,470 children were on the register. A total of 4,207 attendances was made during the year.

Of these attendances

1,590 (38%) were for treatment
2,022 (48%) were for observation
168 (4%) no defect was found
427 (10%) treatment was deferred

Clinics continued to be held in Northampton, Corby, Kettering, Wellingborough, Rushden and Daventry and were started at the Burton Latimer and Towcester Health Centres, with satisfactory results. Attendances at the new health centres have been regular and working conditions are good.

Contact between general practitioners, health visitors, and the speech therapist is facilitated as they are based at the centres. Pre-school children can be more readily referred for treatment and their problems discussed. Working in these centres, the speech therapist is more aware of the team spirit approach to a patient's problem and feels less isolated in her work. Both therapists and parents of children attending, appreciate the efficient working and co-operation of reception staff. At the Towcester and Daventry health centres, Mrs. Hamida has received the utmost co-operation from school heads in allowing children to attend regularly during school hours.

Parents are used to attending the health centres to see their general practitioners and attend regularly with their children for speech therapy. They appreciate the pleasant waiting areas and the chance to talk to other mothers and respect and appreciate what is being done for their children and co-operate by carrying out home practice, which is vital. Regular discussion with parents is much easier to arrange at a health centre than it is at a school, where the facilities for interviewing parents are not always available and they are not obliged to come in order to bring their children for therapy.

Children requiring treatment in the county have been seen and in most areas have been receiving therapy, though in some places treatment has had to be deferred for a period, through lack of speech therapists' time. Efforts have been made to advise parents and teachers how they may help until the children can receive regular treatment.

Considerable thought has been given to the recruitment of speech therapists and during the year it was agreed that full-time therapists having three years experience should be paid at a senior rate. It is hoped that this increase will encourage newly qualified speech therapists to remain in this county service, and will draw more applicants.

Study day

A valuable and interesting study day was held for the County's speech therapists at the Cripps Centre in Northampton on November 25th. Dr. V. V. Tracey and Dr. B. R. Silk, Consultant Paediatrician, Kettering General Hospital who spoke during the morning were introduced by Dr. J. Sarginson who opened the study day and made the audience feel most welcome; Dr. Tracey introduced Mrs. G. Wilson in the afternoon. Speech therapists were invited from the County Borough and surrounding counties as well as a small number of health visitors from the health department. The audience was most interested and enthusiastic to hear about Dr. Tracey's plans for developing the existing schemes for multi-disciplinary assessment of children and for arranging periodic checks on children who either show abnormalities or might be expected because of their past history, to develop some abnormality.

Dr. Silk refreshed the audiences' memories and provided many with most valuable new information. His talk was greatly appreciated.

Mrs. Gerda Wilson spoke about her work with stammerers in Oxford and invited three of her patients to come and talk with her. They were able to illustrate the success of the syllabled timed method and group treatment she is using. Her obvious interest and dedication to this work left the audience feeling stimulated and most enthusiastic.

The day was much appreciated by those who attended and requests for further study days were received.

Position as at 31st December, 1971

Senior Speech Therapist Southern Area—Mrs. A. Hamida.

Senior Speech Therapist Northern Area—Miss R. Kingston (*to October*).

Speech Therapists (*full-time*)—Mrs. J. Bolton, Miss P. Smith, Miss S. George, Mrs. G. Wilson and Mrs. W. Turner.

Miss R. Kingston who held the senior speech therapist post for the Northern part of the County, left in October to take up a post as chief speech therapist in Leicestershire, and Miss Axe left in September to get married. Mrs. Clark retired from her sessional post in November, for domestic reasons.

Miss Smith and Miss George joined the service in September and are working in the areas vacated by Miss Axe and Miss Kingston, in Wellingborough and Kettering.

HEALTH EDUCATION IN SCHOOLS

Miss J. Wingfield, Health Education Organiser

During 1971, it became evident that the pattern of health education in schools must be re-appraised. The need for a general overall pattern of health teaching throughout school life was accentuated by the rapidly approaching compulsory fifth year at secondary school. Detailed study of opportunities for health education will take place early in 1972 when it is hoped that the present " Growing Up " syllabus will be developed on a similar pattern to the new " Areas of Learning " for primary schools.

Primary schools

The Head Teachers Consultative Committee on Health Education continued to meet each term. A main topic of discussion was a means of promoting increased teaching on health topics in primary schools. One method of achieving this is the production of the " Areas of Learning " which is a loose leaf booklet prepared by staff of the Health Department in co-operation with the Head Teachers Committee. Drafts of the booklet were circulated to primary school teachers and many of their comments have been incorporated into the final text. The booklet forms a basis on which children can be provided with a knowledge of themselves and of their environment; and from this develop a more mature understanding of personal and community health during the adolescent years.

Liaison by field staff and health education staff with primary schools has increased considerably during the year. In the Wellingborough area, health visitors have been particularly active in health teaching. Pupils took part in a national competition for the best limerick on the dangers of smoking. First prize was won by Karen Hobbs aged 10 years of Wellingborough Park Junior School, for the following entry:

" There was a man from Saintloo,
Who died at thirty-two,
Started smoking at ten,
Could not leave off again,
I'll never start it, will you ? "

Communications with all primary schools concerning the water safety campaign and production of the " Areas of Learning " led to a closer link with many schools. As a result of this, teachers have requested audio-visual aids on several topics, including a film strip and tape recording for 10-year-olds " A Dangerous Habit ", on the hazards associated with smoking. In contrast, despite elaborate arrangements and provision of tea, a meeting called to interest teachers in the north of the county in the hazards of smoking, failed to attract more than three teachers—all from the same school.

Further contact was made with junior and infant schools to promote dental health. A buzz-saw, brightly coloured and bearing a message on both surfaces, was offered as a Christmas party gift for each child. 73% of schools accepted and a total of 26,000 buzz-saws was distributed.

Secondary schools

During November a meeting of the Committee was held to discuss how to adapt the health education programme in secondary schools to meet the needs of the older pupils during the additional year in school. Members of the original Head Teachers Consultative Committee which was comprised mainly of teachers from secondary schools were invited back to the meeting in order to widen the discussion. This subject will be developed further during 1972.

Liaison with teachers

It is anticipated that now there are four teachers' centres in the County there will be much more liaison with school teachers and health education seminars are on the centres' programmes. Opportunities to use the teachers' centres have been promoted by the members of the Head Teachers Consultative Committee on Health Education.

Water safety

Whilst much of a water safety campaign, conducted during the year, was aimed at parents of young children, information about it was circulated to all primary schools in the county. The leaflets and wallcharts offered to teachers were widely accepted in rural areas but less so in towns. Not only were children taught the possible hazards of playing near canals, rivers, ponds and quarries, they were also taught what to do in an emergency.

Electrical safety

Emergency treatment in the form of mouth-to-mouth resuscitation and treatment for shock was also taught to 13 and 14 year olds in the continuing electrical safety programme. This project, commenced in 1970, was completed during the summer term. Arrangements for the health education caravan to visit secondary schools were more protracted than originally anticipated, due to staffing difficulties. The programme, details of which can be found in 1970 report, was taken by 35 schools and was welcomed by pupils and staff alike. A total of 2,300 pupils, boys and girls, received instruction on domestic electrical hazards and mouth-to-mouth resuscitation. The co-operation of health visiting and ambulance staff was particularly valuable during the project and special mention must be made of production assistance from the Chief Fire Officer and the East Midlands Electricity Board.

It will be evident from what has been said that more teaching time will be needed in order to fulfil the expanding need and opportunities for health education. The time of both health

educators and teachers is already fully occupied. There must, therefore, be the utmost co-operation and amalgamation of expertise between field staff and administration of both professions.

TEACHERS AND MENTAL HEALTH WORKING PARTY

Dr. V. V. Tracey, Senior Medical Officer

Though relatively few children are so disturbed as to need special education at schools for the maladjusted, most schools have a number of children with emotional problems which give rise to difficulties in the classroom. Such children can be a source of anxiety to teachers who often feel ill-equipped to deal with them. In an effort to support teachers and look for ways of offering more information about children with emotional problems a working party was set up at the end of 1969. The working party was a multi-disciplinary group constituted half of head teachers and half of representatives of other disciplines closely concerned with children—the school psychological service, social work and the school health service. As well as being multi-disciplinary, the group brought together people working for Northamptonshire County Council and Northampton County Borough.

Conduct of working party meetings

The group was unstructured and there was no fixed programme of topics for discussion. The first few meetings were devoted to the members of the group getting to know each other as individuals and to learning something about the activities of the disciplines represented. After this introductory stage the head teachers in turn presented disguised case histories and accounts of situations experienced in their schools for discussion of the principles involved and an analysis of the motives behind the ways in which they were handled.

Developments

In the two succeeding years a number of developments have arisen from the original working party meetings. The first development was the formation of new groups formed in three towns, Northampton, Towcester and Corby, each one round a nucleus of four members from the original working party. The history of these new groups differed quite widely. One group had the misfortune to lose several key members who moved away to take up appointments outside the area with the consequence that it never became firmly established and soon ceased to arrange meetings. Another group seemed to be running into difficulties through being unable to define its objectives and was on the point of being wound up early in 1971. It then became involved in a special project concerning the experience of problem children in the schools of the town. In September 1971 a meeting was held to review progress since the working party was set up and to look at the possibility of forming additional discussion groups.

It was decided to form new groups in Daventry and Wellingborough, using, as before, members of existing groups to form the nucleus and establish continuity with the original concept. The Northampton group was to continue, with new members to replace those who had left or were forced to withdraw due to pressure of work.

The group approach has persisted as it has been seen as the best way of approaching established teachers, but there have been other ventures.

During the winter 1970/1971 on the invitation of the Northampton Annexe of Leicester University, the working party presented a series of talks and discussions under the title "Children with problems". The multi-disciplinary approach was maintained by arranging to group the speakers for each evening to represent one or more disciplines as well as involving teachers from various types of ordinary and special schools. The same basic programme was repeated at the Teachers Centre, Corby for the benefit of teachers in the northern part of the County.

Courses for teachers in training

The most exciting development was the invitation from the Northampton Annexe of the City of Leicester Teacher Training College to talk with final year students about children with emotional difficulties. As an experiment, the College arranged to devote one morning to this in the summer of 1970. The student teachers were so enthusiastic that in the following academic year more time was allocated by the College and a programme was developed allocating the first half of three mornings to a factual account of the school health service, the school psychological service and the social services with particular reference to children and the second half to the discussion of a disguised case history illustrating how the service just described had been used to help the child and the teacher. This series of three sessions was followed in the next term by three mornings entirely devoted to free discussion between the student teachers and members of the working party about children with emotional problems and the difficulties they might present in the classroom.

Once again, in the autumn term of 1971 the first half of a similar course has been presented to final year students and the discussion sessions are planned for early in 1972.

During the autumn of 1971 a request was received from the University of Leicester to present a similar course to the graduates taking the one-year teacher training course.

Questionnaire

At the end of the year the questionnaire prepared by the group in Corby was still being studied but certain interesting facts emerged from the preliminary analysis. The most striking was the fact that every form completed contained a request for discussion and more information about the problem of emotionally disturbed children.

Whether talking to student teachers or to teachers with experience in their profession an effort has been made to emphasise the following basic principles and to achieve the objective of better mutual understanding.

1. The need to see decision-making as a multi-disciplinary process.
2. To help teachers to recognise incipient disturbed situations at a stage when a solution is possible and not to wait until a full crisis has developed.
3. To make plain that the so-called experts are simply people with certain specialised training and skills who are not able to achieve the impossible and find a solution to every problem.
4. To support teachers by increasing their knowledge and understanding of emotional disturbances in children and encourage them to accept such children in their classes.
5. To explore ways in which understanding and education about this type of problem can be brought to teachers already in post and to students on teacher training courses.

6. To increase knowledge of the roles and skills of the various disciplines working with children.

7. To give the other disciplines a clearer view of the problem presented to teachers by disturbed children.

IV. STATISTICS

1. The school population
2. Details of schools
3. Medical examinations (a) periodic examinations
   (b) other examinations
   (c) defects found
4. Vaccination (a) Heaf testing and B.C.G. vaccination
   (b) rubella vaccination
5. Infestation and skin diseases
   (a) infestation with vermin
   (b) skin diseases
6. Handicapped pupils
   (a) ascertainments and placements
   (b) requiring special education
   (c) blind and partially sighted children
7. Dental service
8. Child guidance
9. Speech therapy

1. THE SCHOOL POPULATION

The number of children attending school in 1971 was 59,618. The growth of the school population, from 1962 to 1971 is shown below:

	Number of schoolchildren	*Increase or decrease over previous year*	*Percentage increase*
1962	45,929	28	—
1963	45,737	—192	—
1964	46,757	1,020	2·2%
1965	45,742	—1,015*	—
1966	47,386	1,644	3·6%
1967	50,431	3,045	6·4%
1968	51,222	791	1·6%
1969	53,676	2,454	4·8%
1970	56,420	2,744	5·0%
1971	59,618	3,198	5·7%

*Boundary reorganisation.

2. SCHOOLS

The numbers of schools in the County at the end of the year were:

Nursery	4	(number of pupils full-time 99 part-time 152)
Primary	220	
Modern	20	
Bilateral	1	
Comprehensive	14	
Grammar	7	
Special	10	
Total	276	

The special schools maintained by this authority are:

		Pupils on roll
Firdale School, Corby	Day school for E.S.N. pupils	95
Forest Gate School, Corby	Day school for E.S.N. pupils	70
Isebrook School, Kettering	Day school for E.S.N. pupils	100
Kingsley School, Kettering	Day school for physically handicapped pupils	76
Henley School, Kettering	Day school for E.S.N. pupils	74
Loddington Hall, Loddington	Boarding school for E.S.N. pupils	50
Dallington Park School, Northampton	Day school for E.S.N. pupils	55
Brookfield School, Wellingborough	Boarding and day school for E.S.N. pupils	111
Fairlawn School, Wellingborough	Day school for E.S.N. pupils	96
Arkwright School, Irchester, Wellingborough	Boarding school for maladjusted girls	13

In addition, there is a school at the Princess Marina Hospital, Upton, which is functioning temporarily under the supervision of Mrs. M. B. Redley, Head Teacher, Dallington Park School.

3. MEDICAL EXAMINATIONS

(a) Periodic examinations

	Number of examinations		*Pupils found to require treatment*		*Physical condition*			
					Satisfactory		*Unsatisfactory*	
	1971	1970	1971	1970	1971	1970	1971	1970
Children born:								
1966 or later ...	1,428	62	81	—	1,427	62	1	—
1965	2,943	673	134	54	2,942	672	1	1
1964	4,457	1,972	53	141	4,457	1,970	—	2
1963	635	1,020	29	65	635	1,019	—	1
1962	283	414	13	27	283	412	—	2
1961	150	228	3	3	150	227	—	1
1960	56	261	3	6	56	261	—	—
1959	19	157	1	2	19	157	—	—
1958	10	39	—	3	10	39	—	—
1957	3	23	—	1	3	23	—	—
1956	84	291	1	4	84	291	—	—
1955 or before ...	—	211	—	17	—	211	—	—
Total ...	10,068	5,351	318	323	10,066	5,344	2	7

(b) Other examinations

	1971	**1970**
Special examinations	856	862
Re-examinations	782	94
	1,638	956

(c) Defects found

Defect or disease		*Periodic examinations*				*Special examinations*
		Entrants	*Leavers*	*Others*	*Total*	
Skin	T	17	—	12	29	1
	O	58	—	32	90	1
Eyes (a) vision	T	19	—	13	32	—
	O	52	—	48	100	—
(b) squint	T	22	—	10	32	—
	O	76	—	23	99	—
(c) other	T	2	—	4	6	—
	O	13	1	3	17	—
Ears (a) hearing	T	12	—	5	17	—
	O	101	—	50	151	—
(b) otitis media ...	T	11	—	5	16	1
	O	89	—	27	116	—
(c) other	T	3	—	2	5	—
	O	8	—	5	13	—

continued

Defect or disease		*Periodic examinations*				*Special examinations*
		Entrants	*Leavers*	*Others*	*Total*	
Nose and throat	T	45	1	19	65	1
	O	252	—	94	346	—
Speech	T	31	—	5	36	—
	O	111	—	28	139	—
Lymphatic glands	T	1	—	—	1	—
	O	66	—	19	85	—
Heart	T	1	—	—	1	—
	O	43	—	25	68	—
Lungs	T	13	—	2	15	—
	O	68	—	35	103	1
Developmental						
(a) hernia	T	8	—	2	10	—
	O	19	1	7	27	—
(b) other	T	6	—	7	13	—
	O	63	—	30	93	—
Orthopaedic						
(a) posture	T	12	—	6	18	—
	O	25	1	28	54	—
(b) feet	T	30	—	7	37	—
	O	142	1	59	202	—
(c) other	T	12	—	4	16	—
	O	66	1	31	98	—
Nervous system						
(a) epilepsy	T	1	—	—	1	1
	O	16	—	8	24	—
(b) other	T	8	—	4	12	—
	O	37	—	15	52	—
Psychological						
(a) development ...	T	9	—	1	10	—
	O	122	—	42	164	3
(b) stability	T	6	—	8	14	—
	O	135	—	65	200	3
Abdomen	T	1	—	1	2	—
	O	11	—	9	20	—
Other	T	5	—	3	8	—
	O	47	—	14	61	—

T=children requiring treatment, or already under treatment
O=children to be kept under observation

4. VACCINATION

(a) Heaf testing and B.C.G. vaccination

Number of children Heaf tested		1,744
Negative reactors		1,579
Positive reactors		
Grade 1	78	
Grade 2	112	
Grade 3	23	
Grade 4	5	
		218
Number of children vaccinated (negative reactors and Grade 1 positive)		1,657

(b) Rubella vaccination

Girls vaccinated

Vaccinated by general practitioners ...	1,055
Vaccinated in schools	2,561
	3,616

Of an estimated 4,600 girls in the 12-13 year age group, 78.6% have received protection.

5. INFESTATION AND SKIN DISEASES

(a) Infestation with vermin

Individual examinations in schools ...	33,416
Pupils found to be infested	1,183

No cleansing notices or orders were issued under Section 54 of the Education Act, 1944.

(b) Skin diseases

Numbers of cases reported were:

Impetigo	5
Verrucae	—
Scabies	9
Other conditions	—
Total	14

6. HANDICAPPED PUPILS

(a) Ascertainments and placements

	Number ascertained in 1971	*Number placed for special education*	
		Assessed 1971	*Assessed prior to* 1971
Blind	2	—	1
Partially sighted	—	—	1
Deaf	3	1	—
Partially hearing	2	1	—
Physically handicapped ...	14	9	5
Delicate	5	2	—
Maladjusted	17	9	6
E.S.N.	132	58	35
Epileptic	1	—	—
Speech defects	2	—	—
Total	178	80	48

(b) Requiring special education

	Special school		*Special units*	*Boarded out*	*Educated at*		*Awaiting placement*	*Total*
	Day	*Boarding*			*home*	*hospital*		
Blind	—	6	—	—	—	—	3	9
Partially sighted	—	8	—	—	—	—	3	11
Deaf	—	18	—	—	—	—	2	20
Partially hearing	—	12	11	—	—	—	1	24
Physically handicapped ...	50	17	—	—	6	1	7	81
Delicate	12	14	—	—	—	3	3	32
Maladjusted	10	59	—	7	1	4	11	92
E.S.N.	589	92	—	—	1	2	76	760
Epileptic	4	4	—	—	—	—	1	9
Speech defects	1	1	—	—	—	—	2	4
Total	666	231	11	7	8	10	109	1,042

(c) Blind and partially sighted children

Attention has been directed to the problem of educating blind and partially sighted children because of the difficulty now being experienced in finding places at special schools catering for these kind of handicaps, aggravated by the trend towards weekly boarding at these schools which are increasingly reluctant to accept children from long distances away who have to be full boarders. The situation becomes even more difficult when the child has the additional handicap of mental subnormality.

The table shows, by year of birth, the numbers of blind and partially sighted children and the type of school attended.

		Type of school attended		
Year of birth	*Blind/part sighted*	*Physically handicapped*	*Mentally handicapped*	*Ordinary day school*
1955	3	—	—	—
1956	2	1	—	—
1957	2	—	2	—
1958	3	—	1	—
1959	1	—	—	—
1960	1	—	—	—
1961	—	—	—	—
1962	1	—	—	—
1963	1	—	1	—
1964	—	2	6	1
1965	1	2	1	1
1966	—	—	1	1
1967	1*	—	—	1*
1968	One child probably " partially sighted "			
1969	—	—	—	—
1970	One child probably " partially sighted "			

* Awaiting admission.

7. DENTAL INSPECTION AND TREATMENT

(a) Schoolchildren

Attendances and treatment	*Ages 5 to 9*	*Ages 10 to 14*	*Ages 15 and over*	*Total*
First visit	5,664	3,967	630	10,261
Subsequent visits	7,942	8,986	1,522	18,450
Total visits	13,606	12,953	2,152	28,711
Additional courses of treatment commenced	1,085	889	166	2,140
Fillings in permanent teeth	3,847	7,872	1,893	13,612
Fillings in deciduous teeth	5,879	372	—	6,251
Permanent teeth filled	3,252	6,959	1,644	11,855
Deciduous teeth filled	5,051	379	—	5,430
Permanent teeth extracted	897	2,414	294	3,605
Deciduous teeth extracted	7,681	1,777	—	9,458
General anaesthetics	2,856	1,147	86	4,089
Emergencies	1,259	742	135	2,136
Number of pupils x-rayed				1,949
Prophylaxis				1,958
Teeth otherwise conserved				937
Number of teeth root filled				43
Inlays				23
Crowns				31
Courses of treatment completed				10,401

Inspections	
First inspection at school. Number of pupils	19,415
First inspection at clinic. Number of pupils	7,886
Number found to require treatment	17,246
Number offered treatment	15,686
Pupils re-inspected at school or clinic	2,851
Number found to require and offered treatment	1,967

Orthodontics	
New cases commenced during year	355
Cases completed during year	320
Cases discontinued during year	40
Number of removable appliances fitted	440
Number of fixed appliances fitted	40
Pupils referred to hospital consultant — for advice	370
for treatment	52

Prosthetics	*5 to 9*	*10 to 14*	*15 and over*	*Total*
Pupils supplied with full upper or lower dentures (first time)	2	14	—	16
Pupils supplied with other dentures (first time)	11	29	23	63
Total	13	43	23	79

Anaesthetics	
General anaesthetics administered by dental officers	1,381

Sessions	
Sessions devoted to treatment	
Dental officers	3,585
Dental auxiliaries	984
Sessions devoted to inspection	267
Sessions devoted to dental health education	
Dental officers	52
Dental auxiliaries	153

(b) Local health authority dental services for expectant and nursing mothers and children under 5 years

Attendances and treatment

Number of visits for treatment during year	*Children 0-4 (incl.)*	*Expectant and nursing mothers*
First visit	861	93
Subsequent visits	1,192	163
Total visits	2,053	256
Number of additional courses of treatment (other than the first course) commenced during year	94	10
Treatment provided during the year—number of fillings	1,358	177
Teeth filled	2,492	160
Teeth extracted	933	72
General anaesthetics given	322	12
Emergency visits by patients	173	14
Patients x-rayed	6	14
Patients treated by scaling and/or removal of stains from the teeth (prophylaxis)	209	66
Teeth otherwise conserved	531	—
Teeth root filled	—	1
Inlays	—	—
Crowns	—	1
Number of courses of treatment completed during the year	631	35

Prosthetics

Patients supplied with full upper or full lower dentures (first time)	6
Patients supplied with other dentures	6
Number of dentures supplied	13

Anaesthetics

General anaesthetics administered by dental officers	98

Inspections

	Children 0-4 (incl.)	*Expectant and nursing mothers*
Number of patients given first inspections during year	1,943	101
Number of patients who required treatment	964	90
Number of patients who were offered treatment	658	86

Sessions

Number of dental officer sessions (i.e. equivalent complete half days) devoted to maternity and child health patients:	*For treatment*	418
	For health education	17

8. CHILD GUIDANCE

	Boys	*Girls*	*Total*
Cases under treatment on 1st January	90	55	145
Cases taken on for treatment during the year	33	21	54
	123	76	199
Cases discharged during the year	48	33	81
Cases under treatment on 31st December	75	43	118
Cases referred during the year	57	49	106
Cases awaiting treatment on 1st January	25	9	34
	82	58	140
Cases seen by clinic staff	41	32	73
Cases seen and discharged without treatment	1	1	2
Cases not seen	13	10	23
Cases waiting to be seen 31st December	27	15	42
	82	58	140
Referred by:			
General practitioners	25	23	48
Parents	2	2	4
Schools	1	1	2
School health service	11	12	23
School psychological service	4	4	8
Health visitors	1	—	1
Courts	2	1	3
Probation officer	2	—	2
Children's officer	—	1	1
Hospital consultants	9	5	14
Chief Education Officer	—	—	—
	57	49	106
Reason for referral			
Nervous disorders	5	11	16
Habit ,, ...	12	5	17
Behaviour ,, ...	30	24	54
Organic ,, ...	2	—	2
Psychotic behaviour	2	1	3
Educational and vocational difficulties	3	3	6
Unclassified	3	5	8
	59	47	106

In addition, 5 children were seen by Dr. B. F. Whitehead at his clinic in Peterborough.

Hostels

Holyrood Hostel —	children admitted	7
	,, discharged	5
	,, removed against advice ...	2
Rostrevor Hostel —	children admitted	6
	,, discharged	4
	,, removed against advice ...	4

9. SPEECH THERAPY

Children on the register at 31st December:

Number receiving active treatment ...	443
Number under observation	767
Number where treatment deferred ...	260
	1,470

Children removed from the register in 1971:

Normal or improved speech	376
Unable to help further	15
Failed to attend, left the County etc. ...	97
	488

Children on waiting list at 31st December: 51

Children seen in 1971:

	Under school age	*Attending school*
Receiving treatment	161	1,429
Under observation ...	327	1,695
Treatment deferred ...	76	351
No defect found ...	25	143
	589	3,618

CAUSES OF DEATH IN ADMINISTRATIVE AREAS—URBAN DISTRICTS

CAUSES OF DEATH	Brackley M.B.		Burton Latimer U.D.		Corby U.D.		Daventry M.B.		Desboro' U.D.		Higham Ferrers M.B.		Irthlingborough U.D.		Kettering M.B.		Oundle U.D.		Raunds U.D.		Rothwell U.D.		Rushden U.D.		Wellingborough U.D.		Aggregate of U.D'S.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
TOTAL—ALL CAUSES	30	27	32	23	174	132	54	64	37	21	32	20	31	24	258	255	20	20	36	32	32	21	114	91	206	221	1056	951
B5 Tuberculosis of respiratory system	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	2	...	5	1
B6(1) Late effects of respiratory T.B.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	...
B18 Other infective and parasitic diseases	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	1	...	3	2
B19(1) Malignant neoplasm, buccal cavity, etc.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...
B19(2) Malignant neoplasm, oesophagus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	1	...	1	4
B19(3) Malignant neoplasm, stomach	1	...	...	1	5	5	2	3	...	...	2	...	...	...	7	10	2	1	2	1	1	...	1	5	7	7	30	33
B19(4) Malignant neoplasm, intestine	1	1	1	...	2	4	...	2	1	1	2	1	1	1	3	9	...	...	...	...	1	1	5	1	9	5	26	26
B19(5) Malignant neoplasm, larynx	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	...
B19(6) Malignant neoplasm, lung, bronchus	1	...	2	...	16	4	7	1	4	2	2	1	3	...	16	7	2	...	5	...	4	...	5	...	16	3	83	18
B19(7) Malignant neoplasm, breast	...	2	...	...	...	9	...	...	...	...	...	2	...	...	...	6	...	1	...	...	...	...	...	1	...	10	...	31
B19(8) Malignant neoplasm, uterus	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	6	...	...	...	...	...	...	...	...	...	3	...	10
B19(9) Malignant neoplasm, prostate	...	...	1	...	2	...	...	...	2	...	1	...	1	...	8	...	...	...	...	...	1	...	2	...	7	...	25	...
B19(10) Leukaemia	...	...	...	...	1	...	...	...	1	...	...	1	...	...	1	1	...	...	...	1	...	...	...	1	...	1	3	5
B19(11) Other malignant neoplasms	4	...	2	2	9	12	3	2	...	2	2	1	2	2	25	9	2	...	1	5	2	...	4	5	9	10	65	50
B20 Benign and unspecified neoplasms	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	3	2
B21 Diabetes Mellitus	...	...	...	2	1	1	...	...	...	...	...	...	...	...	2	5	...	1	...	1	1	...	1	4	4	1	9	15
B46(1) Other endocrine etc. diseases	...	...	...	...	...	3	1	1	...	...	...	...	...	...	1	1	...	1	...	...	...	...	...	...	1	1	3	7
B23 Anaemias	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	1
B46(3) Mental disorders	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	...
B46(4) Multiple sclerosis	...	...	...	...	...	1	...	1	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	2
B46(5) Other diseases of nervous system	1	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1	2	2	2	2	8	5
B26 Chronic rheumatic heart disease	...	...	...	...	1	2	...	2	1	...	...	...	...	1	5	4	1	1	...	1	...	...	1	2	2	1	11	14
B27 Hypertensive disease	...	...	3	...	5	3	...	1	1	...	1	...	3	1	7	9	...	...	3	1	1	...	3	3	6	10	33	28
B28 Ischaemic heart disease	13	2	7	6	53	26	14	20	12	3	9	6	6	6	64	68	3	3	9	9	10	11	31	23	60	42	291	225
B29 Other forms of heart disease	1	6	2	1	7	2	2	3	2	1	2	...	3	4	7	12	...	1	...	2	1	1	3	3	7	19	37	55
B30 Cerebrovascular disease	...	7	5	5	16	17	4	10	3	3	2	5	4	6	31	35	2	4	1	2	1	2	7	14	22	30	98	140
B46(6) Other diseases of circulatory system	3	1	2	1	3	3	5	7	2	1	2	1	...	2	13	23	4	4	2	1	...	4	6	7	8	32	50	87
B31 Influenza	...	...	...	1	2	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	3	2
B32 Pneumonia	...	3	2	1	5	7	2	2	2	2	2	2	...	...	8	10	...	1	2	4	1	...	7	5	6	9	37	46
B33(1) Bronchitis and emphysema	2	1	...	1	9	6	3	2	1	...	1	...	4	...	26	4	2	1	4	...	3	...	7	1	16	6	78	22
B33(2) Asthma	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	1	2	1
B46(7) Other diseases of respiratory system	...	1	...	...	3	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	2	...	2	4	8	8
B34 Peptic Ulcer	...	...	1	...	3	...	...	1	...	1	...	...	...	...	1	2	...	...	1	1	...	...	...	2	1	...	7	7
B36 Intestinal obstruction and hernia	...	...	...	1	4	1	...	1	...	...	...	...	...	...	1	2	...	...	...	1	1	...	3	2	...	3	9	11
B37 Cirrhosis of liver	...	...	...	1	...	...	...	...	...	1	...	...	...	...	1	1	...	...	...	...	...	...	...	1	1	...	2	4
B46(8) Other diseases of digestive system	...	...	1	...	1	4	2	...	...	...	1	...	...	...	...	7	...	...	...	1	...	...	4	3	2	5	11	20
B38 Nephritis and nephrosis	...	...	...	...	2	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	3	3
B39 Hyperplasia of prostate	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	2	...	5	...
B46(9) Other diseases, genito-urinary system	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	3	1	1	3	6	6
B41 Other complications of pregnancy, etc.	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
B46(10) Diseases of skin, subcutaneous tissue	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2
B46(11) Diseases of musculo-skeletal system	1	1	...	...	...	3	...	1	...	1	...	...	...	...	1	5	...	...	...	1	...	...	1	2	1	5	4	19
B42 Congenital anomalies	1	2	...	...	3	2	1	...	...	...	...	...	...	...	2	2	...	...	1	...	...	1	3	...	...	2	11	9
B43 Birth injury, difficult labour, etc.	...	...	...	...	4	2	3	...	1	...	1	...	2	...	1	1	...	...	1	...	...	...	1	...	...	...	14	3
B44 Other causes of perinatal mortality	...	...	...	...	3	2	...	1	...	...	...	...	...	...	2	2	...	1	1	...	1	...	1	1	...	...	8	7
B45 Symptoms and ill-defined conditions	...	...	...	...	...	1	2	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	3	2
BE47 Motor vehicle accidents	1	...	1	...	7	3	1	2	2	...	1	...	...	...	5	...	1	...	...	...	...	...	6	...	4	...	29	5
BE48 All other accidents	...	...	...	...	3	3	...	1	...	1	1	...	2	...	3	3	...	...	2	...	1	...	1	1	4	1	17	10
BE49 Suicide and self-inflicted injuries	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	2	...	...	1	5	2
BE50 All other external causes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1

CAUSES OF DEATH IN ADMINISTRATIVE AREAS—RURAL DISTRICTS

CAUSES OF DEATH	Brackley R.D.		Brixworth R.D.		Daventry R.D.		Kettering R.D.		Northampton R.D.		Oundle and Thrapston R.D.		Towcester R.D.		Welling-borough R.D.		Aggregate of R.Ds.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
TOTAL ALL CAUSES	72	53	93	91	111	104	75	48	134	139	91	82	99	82	102	91	777	690
B4 Enteritis and other diarrhoeal diseases	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
B5Tuberculosis of respiratory system	...	...	...	...	...	1	1	1	1	...	...	...	...	...	...	1	2	3
B14 Measles	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
B6 (1) Late effects of respiratory T.B.	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
B6 (2) Other tuberculosis	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
B18 Other infective and parasitic diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
B19 (1) Malignant neoplasm, buccal cavity etc.	...	...	1	...	...	...	1	...	...	3	...	...	1	1	...	...	3	4
B19 (2) Malignant neoplasm, oesophagus	...	...	...	...	3	...	...	1	1	...	1	...	...	...	...	1	5	2
B19 (3) Malignant neoplasm, stomach	4	...	4	1	7	1	...	1	3	2	2	...	...	...	3	1	23	6
B19 (4) Malignant neoplasm, intestine	...	2	2	6	2	4	4	...	5	5	1	2	7	2	3	4	24	25
B19 (5) Malignant neoplasm, larynx	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...
B19 (6) Malignant neoplasm, lung, bronchus	8	1	8	2	10	2	6	3	11	1	3	1	7	...	9	...	62	10
B19 (7) Malignant neoplasm, breast	...	2	...	2	...	7	1	2	...	4	...	4	...	3	...	2	1	26
B19 (8) Malignant neoplasm, uterus	...	...	...	2	...	1	...	1	...	1	...	1	...	...	...	...	...	6
B19 (9) Malignant neoplasm, prostate	...	...	3	...	2	...	4	...	1	...	2	...	1	...	1	...	14	...
B19 (10) Leukaemia	...	...	1	...	1	1	1	1	...	1	...	...	...	1	1	...	4	4
B19 (11) Other malignant neoplasms	6	5	6	4	6	12	3	2	5	3	3	2	4	2	2	4	35	34
B20 Benign and unspecified neoplasms	...	...	1	...	...	...	...	...	...	1	...	2	...	...	...	...	1	3
B21 Diabetes Mellitus	...	...	...	1	1	...	...	...	...	...	1	...	...	...	1	2	3	3
B24Meningitis	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2
B46 (1) Other endocrine etc. diseases	...	2	...	2	...	...	...	1	1	...	...	2	...	...	3	1	4	8
B22 Avitaminoses, etc.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
B23 Anaemias	...	...	1	...	...	...	1	...	...	1	...	...	...	...	...	...	2	1
B46 (3) Mental disorders	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2
B46 (2) Other diseases of blood, etc.	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	1	1
B46 (4) Multiple sclerosis	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
B46 (5) Other diseases of nervous system	...	1	2	1	1	1	...	1	1	1	1	...	...	2	1	...	6	7
B26 Chronic rheumatic heart disease	...	...	...	1	1	2	1	...	...	3	1	1	...	...	2	2	5	9
B27 Hypertensive disease	...	...	...	...	3	...	1	1	...	2	2	3	2	1	1	2	9	9
B28 Ischaemic heart disease	22	15	32	25	40	31	15	11	36	32	28	20	33	30	21	19	227	183
B29 Other forms of heart disease	4	5	1	3	4	6	1	4	4	8	5	6	3	4	6	5	28	41
B30 Cerebrovascular disease	4	8	13	21	5	13	9	7	10	17	14	16	6	12	6	16	67	110
B46 (6) Other diseases of circulatory system	1	3	2	3	6	3	4	5	12	8	5	6	3	1	9	9	42	38
B31 Influenza	...	...	...	...	5	6	...	...	...	...	...	...	...	...	...	...	5	6
B32 Pneumonia	6	2	...	4	...	...	1	...	18	28	6	6	5	11	6	2	42	53
B33 (1) Bronchitis and emphysema	5	...	4	1	10	1	8	...	10	1	6	1	9	2	13	2	65	8
B33 (2) Asthma	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	2
B46 (7) Other diseases of respiratory system	...	...	1	1	...	1	2	...	4	1	...	...	1	1	1	1	9	5
B34 Peptic ulcer	...	...	...	...	...	...	1	...	...	...	1	1	...	...	3	2	5	3
B35 Appendicitis	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...
B36 Intestinal obstruction and hernia	1	...	...	1	...	1	...	1	...	1	...	1	...	...	1	1	2	6
B37 Cirrhosis of liver	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	1
B46 (8) Other diseases of digestive system	...	...	3	1	1	3	2	...	...	2	...	1	1	4	1	6	8	17
B38 Nephritis and nephrosis	1	...	...	1	...	2	1	...	...	...	...	...	...	...	...	1	2	4
B39 Hyperplasia of prostate	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...
B46 (9) Other diseases, genito-urinary system	...	2	...	...	1	1	...	...	1	...	1	1	...	...	1	1	4	5
B41 Other complications of pregnancy, etc.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B46 (10) Diseases of skin, subcutaneous tissue	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	1	1
B46 (11) Diseases of musculo-skeletal system	...	2	...	2	...	...	...	3	...	1	...	1	...	...	...	...	...	9
B42 Congenital anomalies	...	...	3	...	...	1	1	...	2	...	1	1	1	1	2	...	10	3
B43 Birth injury, difficult labour, etc.	...	...	...	1	...	...	2	1	...	...	...	...	3	...	1	1	6	3
B44 Other causes of perinatal mortality	...	1	...	...	...	...	1	...	1	...	...	...	2	...	...	3	4	4
B45 Symptoms and ill defined conditions	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	1	2
BE47 Motor vehicle accidents	3	...	...	1	1	...	1	...	5	3	3	1	4	2	1	...	18	7
BE48 All other accidents	1	...	1	2	...	...	1	...	1	3	2	1	3	1	...	1	9	8
BE49 Suicide and self-inflicted injuries	1	...	1	...	...	...	...	...	...	...	...	1	1	1	1	...	4	2
BE50 All other external causes	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	2	...

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON.

CAUSE OF DEATH	Sex	AGGREGATE OF URBAN DISTRICT												AGGREGATE OF RURAL DISTRICTS										
		Total All Ages	*Under 4 weeks*	*4 wks. and Under 1 year*	1—	5—	15—	25—	35—	45—	55—	65—	*75 & over*	*Total All Ages*	*Under 4 weeks*	*4 wks. and Under 1 year*	1—	5—	15—	25—	35—	45—	55—	65—	*75 & over*
B4 Enteritis and other diarrhoeal diseases	M.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B5 Tuberculosis of respiratory system	M.	5	...	...	...	...	...	...	...	...	3	...	2	2	...	...	...	...	...	...	...	1	...	...	1
	F.	1	...	...	...	...	...	...	...	...	...	1	...	3	...	...	...	...	...	...	...	...	...	3	...
B6 (1) Late effects of respiratory T.B.	M.	2	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...
B6 (2) Other tuberculosis	M.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B14 Measles	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...
B18 Other infective and parasitic diseases	M.	3	...	2	1	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...
	F.	2	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
B19 (1) Malignant neoplasm, buccal cavity etc.	M.	1	...	...	...	...	...	...	...	...	...	1	...	3	...	...	...	...	...	...	...	1	...	1	1
	F.	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	1	1	1
B19 (2) Malignant neoplasm, oesophagus	M.	1	...	...	...	...	...	...	...	...	...	...	1	5	...	...	...	...	1	...	...	...	1	1	2
	F.	4	...	...	...	...	...	...	...	1	...	...	3	2	...	...	...	...	...	...	...	...	...	1	1
B19 (3) Malignant neoplasm, stomach	M.	30	...	...	...	...	...	...	...	1	5	12	12	23	...	...	...	...	...	...	...	1	1	6	5	10
	F.	33	...	...	...	...	...	...	1	2	7	8	15	6	...	...	...	...	...	...	...	...	1	1	1	3
B19 (4) Malignant neoplasm, intestine	M.	26	...	...	...	...	...	...	2	1	5	8	10	24	...	...	...	...	...	...	...	3	5	10	6
	F.	26	...	...	...	...	...	...	...	5	3	5	13	25	...	...	...	...	...	...	...	1	7	3	14
B19 (5) Malignant neoplasm, larynx	M.	2	...	...	...	...	...	...	...	...	...	1	1	3	...	...	...	...	...	...	...	...	1	1	1
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B19 (6) Malignant neoplasm, lung, bronchus	M.	83	...	...	...	...	...	...	1	7	27	32	16	62	...	...	...	...	...	...	...	5	19	25	13
	F.	18	...	...	...	...	...	1	1	4	5	2	5	10	...	...	...	...	...	...	...	3	4	2	1
B19 (7) Malignant neoplasm, breast	M.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...
	F.	31	...	...	...	...	...	...	6	4	8	8	5	26	...	...	...	...	...	1	3	5	4	9	4
B19 (8) Malignant neoplasm, uterus	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	10	...	...	...	...	...	...	1	1	4	2	2	6	...	...	...	...	...	1	...	2	1	1	1
B19 (9) Malignant neoplasm, prostate	M.	25	...	...	...	...	...	...	...	...	3	6	16	14	...	...	...	...	...	...	...	...	...	4	10
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B19 (10) Leukaemia	M.	3	...	...	...	...	...	...	...	...	...	2	1	4	...	...	...	...	...	...	...	1	...	...	3
	F.	5	...	...	...	2	...	...	...	...	2	1	...	4	...	...	...	...	...	...	...	...	1	1	2
B19 (11) Other malignant neoplasms	M.	65	...	...	...	...	3	4	3	8	15	17	15	35	...	...	...	...	1	...	...	7	7	14	6
	F.	50	...	...	1	1	1	2	2	8	7	12	16	34	...	...	...	...	...	...	...	8	8	5	13
B20 Benign and unspecified neoplasms	M.	2	...	...	...	...	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	F.	2	...	...	1	...	...	...	...	1	...	...	...	3	...	...	...	...	...	...	...	1	1	...	1

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON.

CAUSE OF DEATH	Sex	AGGREGATE OF URBAN DISTRICT												AGGREGATE OF RURAL DISTRICTS									
		Total All Ages	*Under 4 weeks*	*4 wks. and Under 1 year*	1—	5—	15—	25—	35—	45—	55—	65—	*75 & over*	*Total All Ages*	*Under 4 weeks*	*4 wks. and Under 1 year*	1—	5—	15—	25—	35—	45—	55—	65—	*75 & over*
B21 Diabetes mellitus	M.	10	...	...	...	...	...	...	...	1	2	2	5	3	...	...	...	...	...	...	...	1	...	2	...
	F.	15	...	...	...	...	...	...	...	...	3	5	7	3	...	...	...	...	...	...	...	...	...	1	2
B22 Avitaminoses, etc.	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...
B46 (1) Other endocrine etc. diseases	M.	3	...	...	...	1	...	...	1	...	...	1	...	4	...	2	...	...	...	...	1	...	...	1	...
	F.	7	...	1	1	...	...	...	2	1	...	1	1	8	...	...	1	...	...	...	...	...	2	2	3
B23 Anaemias	M.	1	...	...	...	...	...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	1	...	1
	F.	1	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1
B46 (2) Other diseases of blood, etc.	M.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
B46 (3) Mental disorders	M.	2	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
B24 Meningitis	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	...	1	...	...
B46 (4) Multiple sclerosis	M.	2	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	1	...	...	...	...
	F.	2	...	...	...	...	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...
B46 (5) Other diseases of nervous system	M.	8	...	...	1	...	...	1	1	...	2	...	3	6	...	...	...	1	...	...	...	...	2	1	2
	F.	5	...	1	...	...	...	...	...	...	1	...	3	7	...	...	...	1	...	...	...	1	1	3	1
B26 Chronic rheumatic heart disease	M.	11	...	...	...	...	...	...	...	2	1	4	4	5	...	...	...	...	...	...	...	...	2	3	...
	F.	14	...	...	...	...	...	...	...	1	6	3	4	9	...	...	...	...	...	...	...	2	2	1	4
B27 Hypertensive disease	M.	33	...	...	...	...	...	...	...	...	9	11	13	9	...	...	...	...	...	...	...	1	2	4	2
	F.	28	...	...	...	...	...	...	...	...	...	9	19	9	...	...	...	...	...	...	1	...	1	3	4
B28 Ischaemic heart disease	M.	291	...	...	...	...	...	...	6	28	74	98	85	227	...	...	...	...	...	...	6	18	47	85	71
	F.	225	...	...	...	...	...	...	2	4	20	58	141	183	...	...	...	...	...	...	2	3	8	59	111
B29 Other forms of heart disease	M.	37	...	...	...	...	...	1	3	...	6	7	20	28	...	...	...	...	...	...	...	1	3	8	16
	F.	55	...	...	...	...	...	...	...	1	2	7	45	41	...	...	...	...	...	...	...	...	1	8	32
B30 Cerebrovascular disease	M.	98	...	...	...	...	...	1	1	9	14	33	40	67	...	...	1	1	1	...	...	2	7	22	33
	F.	140	...	...	...	...	...	1	1	5	11	26	96	110	...	...	...	...	...	...	...	5	6	32	67
B46 (6) Other diseases of circulatory system	M.	50	1	...	...	...	...	...	...	...	3	20	26	42	...	...	...	...	1	...	1	1	4	10	25
	F.	87	...	...	...	...	...	...	...	1	1	13	72	38	...	...	...	...	...	...	...	1	2	4	31
B31 Influenza	M.	3	...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	2	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
B32 Pneumonia	M.	37	...	1	...	...	...	...	...	3	1	10	22	47	...	2	...	...	...	...	...	3	2	11	29
	F.	46	1	3	...	...	...	...	...	2	3	7	30	59	1	3	...	...	...	...	...	1	4	5	45
B33 (1) Bronchitis and emphysema	M.	78	...	...	...	...	...	...	...	4	13	34	27	65	...	...	...	...	...	...	1	3	6	24	31
	F.	22	...	...	...	...	...	...	...	...	2	8	12	8	...	...	...	...	...	...	...	...	1	4	3
B33 (2) Asthma	M.	2	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	1	...
	F.	1	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	1	1	...	...
B46 (7) Other diseases of respiratory	M.	8	1	4	...	...	...	...	...	...	1	1	1	9	...	1	...	...	...	...	...	...	2	4	2
system	F.	8		1		1						1	5	5	...	1	...	...	...	...	...	...	1	...	3

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON.

CAUSE OF DEATH	Sex	AGGREGATE OF URBAN DISTRICTS												AGGREGATE OF RURAL DISTRICTS										
		Total All Ages	*Under 4 weeks*	*4 wks. and Under 1 year*	1—	5—	15—	25—	35—	45—	55—	65—	*75 & over*	*Total All Ages*	*Under 4 weeks*	*4 wks. and Under 1 year*	1—	5—	15—	25—	35—	45—	55—	65—	*75 & over*
B34 Peptic ulcer	M.	7	...	...	...	...	...	...	1	...	...	3	3	5	...	...	...	...	...	...	...	...	...	3	2
	F.	7	...	...	...	...	...	...	...	...	...	3	4	3	...	...	...	...	...	...	...	1	...	...	2
B35 Appendicitis	M.	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	1	...	...	1	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B36 Intestinal obstruction and hernia	M.	9	...	1	...	...	...	...	...	1	3	2	2	2	...	...	...	...	...	...	...	...	...	...	2
	F.	11	...	2	...	...	...	...	...	1	1	2	5	6	...	...	...	...	...	...	...	...	...	2	4
B37 Cirrhosis of liver	M.	2	...	...	...	...	...	...	...	1	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...
	F.	4	...	...	...	...	...	...	...	...	...	2	2	1	...	...	...	...	...	1	...	...	...	...	...
B46 (8) Other diseases of digestive system	M.	11	1	...	...	...	...	...	...	1	1	2	6	8	...	...	...	...	...	...	...	...	1	4	3
	F.	20	...	...	...	...	...	...	...	1	4	4	11	17	...	...	...	...	...	...	...	1	2	4	3
B38 Nephritis and nephrosis	M.	3	...	...	...	...	...	...	...	...	...	2	1	2	...	...	...	...	...	...	...	...	...	...	2
	F.	3	...	...	...	...	...	...	1	...	1	...	1	4	...	...	...	...	...	...	...	1	...	...	3
B39 Hyperplasia of prostate	M.	5	...	...	...	...	...	...	...	...	...	1	4	1	...	...	...	...	...	...	...	...	...	...	1
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B46 (9) Other diseases, genito-urinary system	M.	6	...	1	...	...	...	...	...	...	...	...	5	4	...	1	...	...	...	...	...	...	...	...	3
	F.	6	...	...	...	...	...	...	...	...	...	2	4	5	...	...	...	...	...	...	...	1	1	...	3
B41 Other complications of pregnancy, etc.	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B46 (10) Diseases of skin, sub-cutaneous tissue	M.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	F.	2	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...	1
B46 (11) Diseases of musculo-skeletal system	M.	4	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...
	F.	18	...	...	...	...	...	1	...	...	3	2	12	9	...	...	...	...	1	...	...	...	2	2	4
B42 Congenital anomalies	M.	11	4	5	1	1	...	...	...	...	...	...	...	10	3	3	2	1	...	...	...	...	...	1	...
	F.	10	5	4	...	1	...	...	...	...	...	...	...	3	2	...	...	...	...	...	...	...	1	...	...
B43 Birth injury, difficult labour, etc.	M.	14	13	1	...	...	...	...	...	...	...	...	...	6	6	...	...	...	...	...	...	...	...	...	...
	F.	3	3	...	...	...	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...	...	...	...	...
B44 Other causes of perinatal mortality	M.	8	8	...	...	...	...	...	...	...	...	...	...	4	4	...	...	...	...	...	...	...	...	...	...
	F.	7	7	...	...	...	...	...	...	...	...	...	...	4	4	...	...	...	...	...	...	...	...	...	...
B45 Symptoms and ill defined conditions	M.	3	...	2	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1
	F.	2	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	2
BE47 Motor vehicle accidents	M.	29	...	...	2	2	8	4	4	2	5	2	...	18	...	...	...	2	6	3	3	1	1	1	1
	F.	5	...	...	...	...	2	1	...	1	1	...	...	7	...	...	...	...	3	1	...	...	1	1	1
BE48 All other accidents	M.	17	...	...	...	1	1	1	3	1	6	1	3	9	1	...	...	...	3	...	1	...	1	...	3
	F.	10	...	1	...	...	...	...	...	3	1	1	4	8	...	...	...	...	...	...	...	1	1	1	5
BE49 Suicide and self-inflicted injuries	M.	5	...	...	...	...	...	...	2	2	...	1	...	4	...	...	...	...	...	...	...	...	1	3	...
	F.	1	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	1	1	...
BE50 All other external causes	M.	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	1	...	1
	F.	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL ALL CAUSES	M.	1056	28	17	5	5	12	12	29	77	201	320	350	777	14	9	4	6	13	4	18	48	124	251	286
	F.	951	16	15	3	5	4	6	17	49	96	197	543	690	10	5	1	2	5	3	7	44	71	163	379

URBAN DISTRICTS		Brackley M.B.		Burton Latimer U.D.		Corby U.D.		Daventry M.B.		Desboro' U.D.		Higham Ferrers M.B.		Irthlingborough U.D.		Kettering M.B.		Oundle U.D.		Raunds U.D.		Rothwell U.D.		Rushden U.D.		Wellingborough U.D.		Aggregate of U.D's.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Live Births	Total	56	49	68	54	523	468	133	148	51	46	55	45	48	38	397	341	27	23	72	61	38	36	204	176	351	317	2023	1802
	Legitimate ...	54	45	66	52	466	418	126	135	47	42	52	45	47	33	375	312	25	21	69	57	38	34	190	168	324	289	1879	1651
	Illegitimate ...	2	4	2	2	57	50	7	13	4	4	3	...	1	5	22	29	2	2	3	4	...	2	14	8	27	28	144	151
Still Births	Total	...	1	...	2	3	4	1	1	...	1	...	1	...	...	5	2	1	2	...	1	...	...	5	1	7	2	22	18
	Legitimate ...	...	1	...	2	2	4	1	1	...	1	...	1	...	...	5	2	1	2	...	1	...	...	4	1	7	2	20	18
	Illegitimate ...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...
Deaths of Infants under 1 year of age	Total	1	2	...	...	12	13	6	2	2	1	1	1	2	...	5	6	...	1	4	...	2	1	7	2	3	2	45	31
	Legitimate ...	1	2	...	...	11	11	6	1	2	1	1	1	2	...	5	6	...	1	3	...	2	1	5	2	3	...	41	26
	Illegitimate ...	...	...	...	...	1	2	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	2	4	5
Deaths of Infants under 4 weeks of age	Total	1	2	...	...	8	6	3	1	1	1	1	...	2	...	4	3	...	1	2	...	1	1	3	1	2	...	28	16
	Legitimate ...	1	2	...	...	7	6	3	...	1	1	1	...	2	...	4	3	...	1	1	...	1	1	2	1	2	...	25	15
	Illegitimate ...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	3	1
Deaths of Infants under 1 week of age	Total	1	1	...	...	7	5	3	...	...	...	1	...	2	...	3	3	...	1	2	...	1	1	3	1	1	...	24	12
	Legitimate ...	1	1	...	...	6	5	3	...	...	...	1	...	2	...	3	3	...	1	1	...	1	1	2	1	1	...	21	12
	Illegitimate ...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	3	...
Estimated mid-year Home Population		4,960		5,360		47,940		11,790		5,270		4,740		5,190		42,530		3,910		6,040		4,800		20,290		37,960		200,780	
Comparability Factors	Births ...	1.02		1.01		0.83		1.46		1.29		1.30		1.03		1.10		1.30		1.18		1.24		1.08		1.05		1.03	
	Deaths ...	0.96		1.15		2.45		1.02		0.88		1.13		1.06		0.88		0.65		0.79		0.87		0.94		0.86		1.07	

RURAL DISTRICTS		Brackley R.D.		Brixworth R.D.		Daventry R.D.		Kettering R.D.		Northampton R.D.		Oundle and Thrapston R.D.		Towcester R.D.		Wellingborough R.D.		Aggregate of R.D's.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Live Births	Total	105	113	145	113	163	133	88	91	225	208	133	134	247	241	219	179	1325	1212
	Legitimate ...	103	110	135	108	156	124	84	86	218	200	126	124	234	231	211	168	1267	1151
	Illegitimate ...	2	3	10	5	7	9	4	5	7	8	7	10	13	10	8	11	58	61
Still Births	Total	...	4	2	4	1	...	...	...	...	...	3	3	1	4	2	4	9	19
	Legitimate ...	...	4	2	3	1	...	...	...	...	...	3	3	1	4	2	4	9	18
	Illegitimate ...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Deaths of Infants under 1 year of age	Total	1	1	2	2	...	...	4	1	1	1	2	2	7	3	6	5	23	15
	Legitimate ...	1	1	2	2	...	...	4	1	1	1	2	2	6	3	6	5	22	15
	Illegitimate ...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...
Deaths of Infants under 4 weeks of age	Total	...	1	2	2	...	...	3	1	1	...	1	1	6	1	1	4	14	10
	Legitimate ...	...	1	2	2	...	...	3	1	1	...	1	1	6	1	1	4	14	10
	Illegitimate ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths of Infants under 1 week of age	Total	...	...	1	2	...	...	2	1	1	...	1	1	5	1	...	4	10	9
	Legitimate ...	...	...	1	2	...	...	2	1	1	...	1	1	5	1	...	4	10	9
	Illegitimate ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Estimated mid-year Home Population		13,870		17,620		18,750		12,250		24,020		16,780		21,380		18,710		143,380	
Comparability Factors	Births ...	1.22		1.11		1.24		1.13		1.04		1.09		1.09		1.10		1.12	
	Deaths ...	1.14		0.79		1.03		1.01		0.90		1.00		0.95		0.95		0.96	

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